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# THE MARYLAND FARMER:

DEVOTED TO

Agriculture, Horticulture, and Rural Economy.

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## PENCILLINGS BY THE WAY.

### RESOURCES OF THE STATE OF MARYLAND.

GEORGETOWN, July 15th, 1874.

To Col. S. SANDS MILLS, Conducting

Editor of the *Maryland Farmer*:

MY DEAR COL.:—I am happy to report myself for duty after a long absence from our sanctum.—Availing myself of the great medical skill of my eminent friend Dr. Tyler, of Georgetown, D. C., and the generous hospitality and unremitted kindness of his excellent wife, and his entire household, under the blessing of God, I have, to a great extent, recovered my shattered health, after a struggle of many weeks. In the few rides I was able to take, in and around the Capitol of the nation, I saw much to arrest the attention of the patriot, the admirer of nature, the farmer and the horticulturist. But I shall not encroach on your or your reader's time by describing all I saw, illustrative of the grand scale on which everything seems to be done by the nation to make the Capitol of the United States one of the most attractive places in the world for magnificence, and as the seat of science and every department of human knowledge. I will not speak of the public Buildings, Statues, Colleges, Schools of Scientific learning, Museums, Hospitals, nor of the enduring monuments, of the practical and charitable wisdom of one of the oldest inhabitants, who is pre-eminently ranked among the greatest Philanthropists of this or any other age.—I shall only record what I deem may be of interest to the land workers, and such as sympathise with them.

While much may be said of the beauty of the surroundings of other cities, our own Baltimore especially, I must think that the classic heights of Georgetown and the high lands that stretch far into Montgomery county from the Potomac toward Rockville, present to the lover of fine scenery the loveliest views that are to be found anywhere in this country. The Potomac rolling to the south, and

the two cities lie stretched at your feet, with the great capitol standing out in bold relief, opposite, three miles, that venerable seat of learning, the Jesuit College on the river's banks, with the nation's reproach—the half finished monument to the father of his country, standing midway. Looking at the country from the heights, with an eye to its agricultural advantages, we see splendid farming lands on the Virginia side from famed Arlington to the Blue Ridge, and highly improved farms in Montgomery county, Maryland. Among those farms lying on and contiguous to the Rockville and Georgetown turnpike, may be named as evincing skill and the marks of highly improved culture are, the old Loughborough Estate; Mrs. Nourse's: the famous Myrtle Place, the old homestead of the Murdock family, now owned by James L. Davis, Esq. It is remarkable for the surrounding scenery and fine view of Virginia, extending to the Sugar Loaf mountains of the Blue Ridge range; College Villa; the farms of Messrs. Dunlop, Laird, Claggett, Hon. Greenbury Watkins, and many others. This whole region is naturally a splendid farming country. The chief attention seems to be given to hay, wheat, oats, garden vegetables and fruits, to each of which the soil and locations seem admirably adapted.

It is strange how little the general topography and peculiar characteristics of most of these farms have changed in many years. Not having seen them for nearly half a century, I at once distinguished the outlines of each by some well remembered object or peculiarity by which I knew them, when, as a boy, I roamed over them. But they were then well managed.

Montgomery county is now one of the most thrifty counties in the State. Her agriculture has been greatly improved of late—the high-ways are in good order, and free from gates—her people are industrious, economical and full of enterprise, yet with a healthy climate, and all the many advantages of nearness and facilities to markets, &c., the lands are on average held at a low figure. The splendid

estate, called the *Washington Estate*, about four miles from Rockville, was sold by a trustee after several previous ineffectual efforts, for only \$8 per acre. It is most remarkable that land buyers from the north, and our own people, will settle in the West and leave such low priced lands, improved with buildings and fences, and possessing so many advantages. Surely it is because our advantageous position is not known abroad.

This reminds me of a conversation I lately held with the accomplished and learned Professor S. Tyler, L. L. D., who said: "the many advantages Maryland possesses over most of her sister States is not known." He then stated that he happened last spring at the house of a United State Senator, where he met a Senator from the far west, a gentleman of fame, but who proved ignorant of the resources of Maryland. Something was said by the Senator whom they were visiting about the high price of fish, *here*, where he supposed the Potomac fisheries would supply them cheap, but he paid 50 cents a pair for shad. The Senator from the far west said: "why, the reason is, I suppose, these Maryland fishermen are old fogies and have short seins, and are not up to modern improvements in fishing." This fired the Professor, who replied—"How long do you take the seins in the Potomac to be?" "About 50 or 100 yards, I suppose."—"Why, sir," said the Professor exultingly, "some of them are, I am told, nearly *seven* miles long, worked by horse and steam power; one or two mile seins are small affairs." This seemed to stagger both senators. They were surprised, and enquired what became of the fish. The reply was, "they are sent to New York and the West, where they bring high prices. The Potomac Fisheries yield annually hundreds of thousands of dollars, beside enormous quantities of fish consumed at home, that are taken from the Patuxent and other rivers on the Western and Eastern shores of the State. Maryland has greater innate power and sources of wealth than any of her sister States, in proportion to her territory. Her coal fields are of great extent and inexhaustible. She is rich in iron mines, in various portions of her domain.

The finest, prettiest, and most durable building stone and extensive marble quarries are abundant. The lands are fertile and the climate healthy.—Turnpikes and Railroads run through every county, and lead to her great and flourishing mart—Baltimore—in direct communication with Europe; many of them lead also to other large cities. She owns the great Chesapeake and Ohio Canal—which transports the coal from the Alleghany beds to the coast and northern coal depots. The Chesapeake Bay, a grand inland sea, lying in her lap, and almos

dividing her domain, yielding immense amounts of luxurious food for her people, and furnishing a trade, in her shell fish and the water fowls and fish, with every country where the flag of the Union is borne, amounting to millions of dollars, and employing at good wages thousands of men, women and children. The fine rivers that traverse the different parts of the State, furnish ample water power for any amount of manufactories, of which there are already a large number adapted to every kind of work.

There are no finer lands and clime to be found for stock breeding. The southern part of the State, was once termed the "Race-horse region of America," and much valuable stock is yet found in our borders, comprising horses, cattle, sheep, &c.

The products of her soil are in the aggregate value enormous, and of a varied character. Corn, Wheat and Tobacco are the staple crops, while her Horticulture affords the finest fruits and vegetables, of which millions of dollars worth are *canned* and sent to foreign markets, besides the great quantities sent to the west and south of the United States.

The people are hospitable and energetic, and enterprising. The first great railroad—the Baltimore and Ohio—was chartered by Maryland, and built by private capital and energy, and now is one of the best managed and most important in the Union, having connections extending even to California. This is some evidence of the enterprise, and a rebuke to the charge of "*old foggism*," of the people of this famous old State, whose history compares most favorably with any State that has ever existed in the tide of time; and yet men of learning and high position are ignorant of her claims to pre-eminent consideration, to all who seek a desirable homestead surrounded by every requisite to make a comfortable and prosperous abiding place for life.

All that Maryland now wants is a full history of her resources and her varied advantages, like Iowa, and other new States have had prepared at the cost of the State, and given extensive circulation in Europe, that a full tide of well-to-do and industrious immigrants might be induced to make their homes here instead of 1500 miles away from exporting markets and all the comforts of civilization, for years to come.

The individual owners of land should not wait for legislation, but unite and contribute funds for such purposes, and the employment of suitable agents to visit Europe and there verbally and by advertisements in the newspapers, in different localities, make known the great benefits that would accrue to farmers with capital, and to every working man, by their emigrating to Maryland. Perhaps more anon on this important subject. B.



*Agricultural Calendar.***FARM WORK FOR AUGUST.**

The month of August may be called the winding up month of the making of the crops for the year; it is the last month of Summer. In August the bulk of the great peach crop matures and other fruit becomes abundant: corn and other grain come to maturity while the hay and the small grain crops have been secured. Wheat, &c., is usually thrashed and cleaned this month, if not marketed. The melon and the tomato crops are now crowding the markets, and each have become, and are yearly on the increase, important branches of trade. The tomato crop in this State is second only to the grain or tobacco crop in importance and value.—The melon culture, in certain localities, is profitable, and it, with the sweet potato, adds greatly to the industrial pecuniary resources of the people of the Middle and Southern States. In looking back, we think on the whole this has been a very satisfactory, if not an abundantly fruitful year for the cultivations of the soil, in the agricultural and horticultural departments, notwithstanding the dry time of June in some sections, the unusual violence and extent of some storms; the hail storms that have visited some places, and the ravages of the Colorado bug and grass-hoppers. These things we must look for in a country of such vast extent as ours. The people of our immediate section have much to be thankful for in the past season. The grain and hay and vegetable and fruit crops have been with exceptionable instances, very abundant, and unusually superior, with a favorable spell of weather for securing them.

**CORN.**

This crop, owing to many reasons, has proved backward, but is now "laid by," we presume. If we have a wet August, a large crop may be expected. One chief reason why the corn crop is late, we are sorry to say, from our own observation and from what we learn from others, has been owing to the bad preparation of the land for the reception of the seed, and want of manure. When will our farmers learn to quit the old ruinous system of corn culture, and adopt the better plan of making one acre yield, what four or five have done heretofore, by proper culture and heavy fertilizing with manures as are suited to this voracious plant, but which will always more than repay for the food and care furnished it.

**RYE.**

This crop requires early sowing, and many be grown the latter part of the month among the

standing corn, cultivated in or put in with the Iron Shovel plows; then sow clover seed and "bush" it in, or run very light harrows—wooden teeth put in the expanding cultivators, make nice harrowing for putting in small seeds.

**CLOVER SEED.**

By sowing clover seed this month, and before the 20th of next month, an early crop next year is secured, and the chance offered to sow it over in winter or next Spring, should the sowing now fail to take.

**CLEANING THE FIELDS AND FALLOWING.**

The fields should now be gone over and the briars and bushes cut and grubbed up and piled in heaps for burning when dry. Clean out the fence corners, trim up the trees, and if there be time, haul the turf from the fence bulks and the high lands, to the poor spots, or to the barn yard, for compost and to absorb the liquids. Ditch the wet places and underdrain, if possible—but get rid of the surplus water that stagnates in the soil. Any grass land intended for wheat may now be plowed and harrowed, so as to be ready for cross plowing at proper time for wheat seeding. If it were sown with peas and buckwheat, or either, so as to be turned in as a green crop with a coat of plaster, it would all be for the better. If the land be foul or covered with much vegetation, we should prefer to feed it down close with all the stock, cattle, sheep and hogs, we could crowd on it, before fallowing. It is better for the wheat crop to have a clean fallow than have the ground made friable or kept loose by the dry vegetable substances which slowly decompose. It is different with green crops turned under; they very readily decompose. Sheep are great gleaners, and a field intended for wheat is wonderfully improved by being closely depastured by sheep before being broken up by the plow. Sheep are valuable on this account, and pay well for their keep.

**STOCK.**

The pastures are commonly bare at this season of the year, and stock become troublesome, therefore the fences ought to be kept in order, that they may not acquire the habit of breaking out of the enclosure. Give them free access to salt and ashes. Sheep should have tar in their troughs.—Young stock ought to have a little grain daily.—Hogs, if possible, have the run of the orchard.—Feed to them grain and fallen fruits, all the vegetables and milk that can be obtained, besides the kitchen slops.

Cows, and work cattle, and horses, ought to have green corn fodder, which had been sown broadcast for the purpose, or grass, fed to them daily, if the pasture is very bad. Millet is nice feed for stock

at this time. As we have often said, there is no use in keeping poor, indifferent stock half starved. Keep all you can, but keep no more than you can keep well, and let it be of the most approved kind of its particular breed. Two good cows properly fed and managed of some one of the best breeds, will give more satisfaction, cost less in keeping, and yield a yearly profit much greater than half a dozen half starved badly milked and managed common old fielders. It is hard to make our people believe this, but let him who doubts try it, and he will be convinced, or he can call on us for the damage he sustains by following our advice.

#### TOBACCO.

The tobacco crop, we are glad to learn, has been planted and looks well. The storm of the 4th July enabled most of the planters to finish setting out their full crops in this region.

We learn that old Prince George's the once great tobacco region of Maryland, this year, for the first time for a long while, presents the pleasing aspect of Auld Lang Syne, in the promising appearance of its great staple product. Keep the ground clear of grass and well stirred, dress the plants with plaster, and destroy the worms—meet the great foe of this crop, in its first advances, and destroy the worm and the eggs of the first “glut” and there will be no trouble when the second comes at “housing” time. We know this is easier said than done, yet we know the import of what we write, and that a stitch in time saves nine. Be careful and not work the tobacco when the land is wet, unless it be showery and the grass is getting too much head way.

#### TURNIPS.

Prepare the ground intended for Turnips by deep plowing and manuring, then get into good tilth by frequent harrowing; fertilize with bone-dust or Superphosphate—sow the seed broadcast, or in drills 18 inches apart, which is much the better plan—sow between the 10th and 25th of the month. Keep clear of weeds, thin to 6 inches apart in the drill—if broadcast, as soon as they begin to bottle or get in the rough leaf state, pass a drag lengthways and crossways over the ground, and it will destroy the young grass as well as thin the turnips, and materially assist in the labor of hoeing and hand thinning. If the fly be troublesome, mix sulphur, soot and ashes and sow over the turnips—also sow over the ground three bushels of salt and one of plaster per acre, well intermixed after lying in pie for a few days. Sow turnips in the rich spots and low grounds among the corn—they often prove a good crop without any work.

#### RUTA BAGA.

Keep the Ruta Baga free from grass and well worked. A dressing of leashed ashes, Missouri bone meal and plaster in equal quantities would be of much service to this crop at this stage. It is presumed it has however been highly fertilized, besides the land made rich with stable manure, applied sometime before the seed was sown.

#### ORCHARDS.

Kill the caterpillars and other insects—remove the broken limbs; thin the fruit where too crowded; prop limbs that are likely to break off and pick up all the fallen fruit and dispose of it to the cows and hogs.

#### BUCKWHEAT.

Sow first week of the month a patch, that you may sell more than will supply your family with buckwheat cakes, and its concomitants, butter and syrup,—although as a good manager, each family should have a supply for this purpose of strained honey, far better than any other sweetening.

#### POULTRY.

As the moulting season for poultry is at hand, they require attention and good feeding—keep the poultry houses clean and white washed—the floors covered with short dry grass or straw, and see that the fowls have access to a plenty of clean water, with grass or vegetable leaves, or a few hours run in plowed ground or grass lands. Have low roosts for the improved breeds of the large kinds, such as Cochins, Brahmas, &c.—they often injure themselves by getting down from high roosts.

#### Recipe for the Destruction of Small Insects.

On our grape vines, a small insect known as the leaf hopper is often destructive. It is very nearly allied to the thrips of greenhouses. Besides this there are many other small insects, which not only injure fruit trees, but flowers in the gardens, and trees and shrubbery on the ornamental grounds.—The *Garden* of London, has recently given the following recipe, which may have an interest for our readers also:

“Dissolve 8 lbs. of the best soft-soap in 12 gallons of warm rain water; then, when the water is cold add a gallon of strong tobacco juice. Indian Azaleas are very subject to this pest, and if the plants can be dipped in this mixture, or, if too large, syringed with it twice, at the interval of two or three weeks, it will quite clear them of it. After dipping or syringing the plants with this mixture, and before it dries on the foliage, it is safest to syringe them again with clean soft water; thus all the dead insects will be washed off and the foliage made clean. Fumigation with tobacco is a good check against the thrips, if repeated at intervals of three or four days, but nothing is so effectual as dipping in the above mixture.”

## GARDEN WORK.

## GARDEN WORK FOR AUGUST.

To the amateur gardener, and the ordinary private gardeners on the farm, this is a month of comparative leisure—but to the market gardener it is very different. In small gardens for private use, but little is required to be done except keeping the ground clean; saving seeds; preparing beds, from which crops have been gathered for sowing seeds the last of the month and the first of the next.

*Celery*.—Plant out in trenches or on level ground 4 inches apart in rows 3 feet apart, if not already done—water freely—shade in middle of the day. Use liquid manure, and weak brine once or twice a week, by side of the plants, not on them; over the plants a little sprinkle of water daily. By forcing a rapid growth this popular and valuable vegetable will be tender and yet large.

*Cauliflower*.—Do not let cauliflowers suffer for want of work and water.

*Pepper*.—The same should be observed in regard to peppers as to the treatment of the brocoli and cauliflower.

*Endives*.—Tie up or otherwise blanch Endives.

*Strawberry Beds*.—Keep Strawberry vines free from weeds and all runners, except those intended for planting.

*Ockra and Corn*.—Cut in slices and dry, Ockra, for winter. This plant is delightful for flavoring and thickening soups—indispensable in vegetable soups, and succotash.

*Turnips*.—Sow the Red-top turnip.

*Radish*.—Sow seed of white large Turnip Radish.

*String Beans*.—Early in the month sow a few rows of snap beans. They will come to table before frost.

*Onions*.—Sow seeds of the Onion thickly, in drills, or broadcast, under partial shade, on thin land, for sets or buttons next spring. They may be taken up late this Autumn or covered with coarse manure and left in the ground all winter. Some persons sow the seed thin in drills and then thin them to two or three inches apart, in rich ground. Cover well the spaces between the rows or drills with half rotten manure, before frost sets in, and protect with straw and brush, during winter, by which process, early onions are often obtained. The drills should be on ridges, so that water may not settle about the bulbs as onions are impatient of water, it causing them to rot.

*Beets*.—The seed of the long Blood Beet may yet be sowed for winter use.

*Lettuce*.—Sow a small bed of Lettuce, to plant out next month.

*Seeds*.—Let us earnestly advise you to be careful and save seeds from your most perfect vegetables, especially, Tomato, Egg plant, largest peppers, Lettuce and other sorts, that are not always true to name, when bought from Seedsmen. A few seeds of prime specimens, are easily saved and will suffice for a private family. One feels secure if he sows the seed he saved himself.

On this subject we do not think it amiss to impress upon our readers the propriety of saving the stones of such peaches as may be of a superior quality and plant them, for in this way the best and longest lived orchards have been grown by such careful collectors of the stones of the best varieties of this fine fruit. In almost every case, the fruit from the stone will be similar, if not better, than the present, whether the original had been a grafted or budded tree. Trees grown in this way will not bear quite so soon as if budded or grafted, but many pomologists of experience say, that as a rule, they are healthier and much longer lived.

*Caterpillars, &c.*—Keep all the small fruits and bushes, and dwarf trees, indeed, all the trees in the garden free from these terrible pests. Look out for, and destroy as fast as seen, the Colorado Bug and other pestiferous insects. The garden is often the nursery for these hindrances to the profit and pleasure of gardening.

*Raspberries*.—As soon as the raspberries have done bearing, cut out the old stalks and the sickly or small shoots, leaving three or four of the stoutest young canes to the hill for bearing next year.—Give them a good working, and top them at 3 or 4 feet high, so they may become strong and ripen the wood against winter.

Keep the whole garden neat and tidy. Suffer no weed or grass to seed. This is the time to effectually destroy troublesome weeds or grasses.

## Thirty Years of Sheep Husbandry.

A Kennebec valley farmer, who has not only kept sheep from 1840 to 1874 without any change, but has a record of the result, reports the same to the *Maine Farmer*:—From 1840 to 1850 he got an average price of 29 4-5 cts. per pound. The highest weight of fleece the best year was 3 $\frac{3}{4}$  lbs. each. From 1850 to 1860, the average weight of fleece was 3 $\frac{3}{4}$  lbs. and the average price was 40 cts. Between 1860 and 1870 his average number of sheep was 95, and the average price was 50 cts. From 1870 to 1873, he kept 50 sheep, and the average weight of fleece was 5 lbs. 10 oz., average price 52 cts., a constant increase in weight of fleece and price.



## AN IDEA IN THE ROUGH.

BY DAWSON LAWRENCE.

*To the Editors of the Maryland Farmer.*

From some of my farm operations this season, I wish to offer an idea to be worked out by some of your public spirited readers for the benefit of others; or perhaps, our State College—I have a chapter on that institution waiting to be written out—will try the experiment and report; a quarter acre would do for trial: we of the practical army are really too busy to do necessary work, without experimenting. I am now (July 11) preparing a piece of ground for fodder corn, 5 acres—2 bushels per acre, in drill, 4 feet apart. I sowed rye on it last fall, fertilized in drill 200 lbs. per acre.

I plowed under (June 5) part of this rye when it was 2 feet over the plowman's head, rank: here comes in one idea:

The great need of all our lands, particularly light, hilly land, is organic matter: could we not plow and subsoil (where necessary) and harrow and roll early in the fall or last of August, the land designed for corn the ensuing season, and drill in rye—a bushel to the acre and 200 lbs. fertilizer, (a good ammoniated superphosphate with potash in it, I use) and then plow under that rye in the spring in time for the corn crop?

Vegetable matter is especially beneficial to the corn crop, when plowed under, not only on account of the plant food its decomposition furnishes but its retention of moisture during the season the plant most requires it: you have noticed that our light sandy hilly land, which do not pay for cultivating in a spring crop, will produce under proper treatment a good winter crop: wheat or rye. Now, any quantity of inorganic matter applied to such lands will not, in the absence of organic matter, produce a good crop, and this rye plowed under would furnish the vegetable matter to retain the moisture for the decomposition of the fertilizer applied to the spring crop. I can readily account for the outcry against the fertilizer manufacturers from the inefficiency of their wares: they furnish the inorganic constituents of plants: the moisture must be supplied from some source to prepare them for the plant evaporation and percolation, so rapid in some soils, that unless some medium in the soil retains it, enough is not left to furnish food for the plant, and this is the great office in the soil, of humus—decomposing vegetable matter.

As stated above, I began to plow under the rye June 5th, when the grain was in milk: other work pressed upon us and that was left until the grain became ripe and I was fearful the rye, if plowed

under, would sprout before decaying, and give us trouble in the corn rows: the rye was cut, hauled off and stacked, and the ground then plowed for corn fodder. Here comes in another idea: we want to raise as much from our land as possible: we want to feed high and work hard to get the best results in farming: could we not thoroughly prepare our corn land in the fall very early, fertilize heavily, sow rye as above suggested, cut it at maturity, haul off and plow the land for corn? Or, if the land is properly cultivated, plowed, subsoiled, well cultivated, cleared from stones, rolled and well fertilized, the land would not want plowing in the spring: the furrows for planting would go over much of the ground, the coverer would make the strip still wider and the small unworked space left could soon be broken out by the cultivators after planting, the corn thus put in would require very little working, as it would not be so grassy and weedy as the corn planted on the sod early in the spring, which is constantly disturbed by the germination of all the seeds of weeds and grass in the soil, which vegetation must be removed by hard and persistent working during its early stages: an objection to the processes above suggested is, that they would come in a time when we are driven by work, but will not the vegetable matter in the soil in one case, or the crop of rye in the other, pay for the outlay?

In the case of plowing under the rye, this could be done in May or early part of June, time enough for an early variety of corn: we began to cut our rye for soiling this year May 11th; I believe it could be seeded in the fall so as to be ready to cut May 1st.

In the case of cutting the rye, this may some times be done in the middle of June, time enough in some sections for a crop of some early variety.

A trial or two on a small scale would solve the question for each farmer.

CHICORY IN GROUND COFFEE.—A preliminary examination of coffee for admixture is best made by gently strewing the powder upon the surface of cold water. The oil contained in coffee prevents the particles from being readily wetted by the water, thus causing them to float. Chicory, burnt sugar, etc., contain no oil, and their caramel is very quickly extracted by the water, with production of a brown color, while the particles themselves rapidly sink to the bottom of the water. On stirring the liquid, coffee becomes tolerably uniformly diffused without sensibly coloring the water, while chicory and other sweet roots quickly give a dark brown turbid infusion. Roasted cereals do not give so distinct a color.



For the Maryland Farmer.

### Wheat Raising---Large and Small Yields.

It is an old and true proverb, "that he who makes two blades grow where but one grew before is a benefactor to our race."

If the farmers can be persuaded, or by any means be enabled to increase the general yield of *wheat*, even by one-fourth, and preserve the fertility of their soil, a great good will be accomplished; and this ought and can surely be done.

The annual reports of the Agricultural Department at Washington, show that the average yield, per acre, throughout the country, is about eleven (11) bushels.

In Maryland the average yield of wheat was—1865,  $9\frac{1}{2}$  bushels; 1867, 11 bushels; 1870,  $9\frac{3}{4}$  bushels; and in 1871, 12 bushels.

This small yield pays very little or no profit, to the farmer for raising it—scarcely more than covering the expense, when the seed, labor, taxes, and interest on the price of the land, are taken into account.

Now, let us look at the larger yields which can be, and often are obtained, by thorough and proper cultivation, double and treble the average, and at no more than one-third to one-half more cost per acre, but at a less cost per bushel, for the grain, and note how much more profitable, therefore, is the thorough culture, large yield process.

R. W. Pruitt, Alabama, in 1869, raised 32 bushels per acre, on a considerable field. Samuel Bailey, Georgia, same year, raised 57 bushels per acre.—F. Stephenson, same State, in 1865, raised 9 bushels per acre; by deeper plowing and green manuring, in 1867, he got 17 bushels per acre; in 1869, with one inch still deeper plowing, and turning under more green stuff, on same land, he got  $27\frac{1}{2}$  bushels per acre, and at larger profit than realized from the previous crops. James Graham, Michigan, raised  $35\frac{1}{2}$  bushels per acre, C. T. Beck, same State, got 37 bushels per acre, Joseph E. Roberts, New Jersey, raised 30 and 31 bushels per acre, for several years in succession. The *Rural Home*, Rochester, New York, reports 40 bushels the acre, in that region, on a large field, plowed 12 to 14 inches deep. Reports from Minnesota show several fields giving various yields, from 10 to 32 bushels the acre, under different culture.

We have read of crops of wheat being raised in Maryland and Virginia, in past years, as high as 30, 42 and 54 bushels the acre; yet, see the above stated meagre average in this State.

H. S. Hart, Filmore county, Minnesota, reports that several fields in that county yield 32 bushels the acre, while the average yield in the county is only about 22 bushels.

A. M. Latham, in South Carolina, reports raising 367 bushels on seven acres, being over  $52\frac{1}{2}$  bushels per acre; and that State is not so good as Maryland for wheat.

Then, it may be asked—is it wise or creditable for the many to raise such small, shiftless crops, when others get those large yields? Why should a few get 20 to 50 bushels the acre, and the mass of farmers get only 9 to 15 bushels? and on equally as good land. There is much more profit realized from the larger yields than from the smaller; and no one can doubt or dispute that the lands of Maryland are superior for wheat—it is eminently a favorable State for wheat, both in quality and quantity. Where is our pride?

In another paper, if desired, we will give in detail, the manner in which most of the superior crops are produced; and the way in which 30 to 40 bushels the acre may be common and not exceptional yield; and that too, at greater profit, and better preservation of the fertility of the soil, than obtained under the course which gives those small averages. The writer of this has, more than once, raised 25 to 35 bushels of wheat the acre, on no better land, and in less favorable localities than Maryland and Virginia present.

And, if desired, a paper will be given, showing how *Corn* may be raised profitably—60, 80 and 100 bushels the acre, as a common and not exceptional yield; for the writer of this has raised a hundred bushels the acre more than once, of good, sound, shelled corn; and it cost one-fourth less per bushel, than in cases where only 30 or 40 bushels the acre were gotten.

But, it is perfectly safe to say, that 20 to 40 bushels of *wheat* the acre may regularly be obtained, three in every five years, without impoverishing the soils; and one good crop of hay during the same time.

LAND MARK.

[We shall be pleased to hear from our correspondent in regard to the increased yield of wheat and corn, as we could offer nothing of greater interest to the raisers of these two staple crops. There is nothing more cheering to the hearts of farmers than large yields of wheat and corn.]

REMOVE THE FLOWERS.—The Garden says:—"All lovers of flowers must remember that one blossom allowed to mature or "go to seed" injures the plant more than a dozen buds. Cut your flowers, then, all of them, before they begin to fade. Adorn your room with them; put them on your tables; send bouquets to your friends who have no flowers, or exchange favors with those who have. On bushes not a seed should be allowed to mature."

*Reported for the Maryland Farmer.*

## OFFICIAL REPORT OF THE NATIONAL FIELD TRIAL OF HARVEST IMPLEMENTS.

Under the Auspices of the Chester County Agricultural Society of Pennsylvania.

The Trial commenced on the 30th of June, and continued four days. The competing machines in mowing and reaping, were:

1. The Peerless, as a combined mower and reaper, and as a single reaper, C. Russell & Co., Canton, Ohio.
  2. The Buckeye, Jr., as a combined machine, by C. Aultman & Co., Ohio, and D. W. Entriiken, Chadd's Ford, Pa.
  3. W. Anson Wood's Eagle Mower, by the Eagle Manufacturing Company, Albany, N. Y., entered by Nash Bros., New York City.
  4. Wilber's Eureka Mower, No. 3, by Eureka Mower and Reaper Co., Poughkeepsie, N. Y.
  5. Wilber's Eureka Mower, No. 2, by Towanda (Pa.) Eureka Mower Co., S. D. Madden, President.
  6. Meadow Lark, special mower, by Rochester Agricultural Works, N. Y.
  7. Hubbard Pony combined mower and reaper, by Rochester Agricultural Works, N. Y.
  8. Meadow Lark combined mower and reaper, by Rochester Agricultural Works, N. Y.
  9. Screw Mower, by Screw Mower and Reaper Company, Phillipsburg, N. J.
  10. Keystone Mower, by Screw Mower & Reaper Company, Phillipsburg.
  11. Keystone combined mower and reaper, by Screw Mower and Reaper Company, Phillipsburg.
  12. Buckeye, Jr., as a reaper, with Miller's table rake, by C. Aultman & Co., Ohio.
  13. Dodge combined mower and reaper, by Dodge & Stevenson Manf. Co., Auburn, N. Y.
  14. Meadow Lark special mower, for one horse—also exhibited as one-horse reaper—by Rochester Agricultural Works, N. Y.
- Mr. Anson Wood made a private test of a new special reaper recently invented by him, but it did not enter the competition and was not examined by the judges.

There were also entered three hay tedders—the Bullard, the Superior, and the Burdick; three hay rakes—Wisner's self-discharging rake, made at Dayton, Ohio, Wisner's hand-lever rake, made at Port Chester, New York, and a hand-dumper lock-lever rake, made by Coates & Gray, Massillon, Ohio.

The fields and meadows on which the trials were made, were on the farms of Wm. T. Painter, Wm. Gibbons and Joseph Darlington, all lying on the Brandywine, in Chester county Pennsylvania, near the memorable "Battle Field."

The grass and grain cut and manipulated, was such as to afford reliable and severe tests of the various machines, hence the result attained will be a safe guide to farmers desiring to purchase.

Besides the machines enumerated above, there was worked and thoroughly and satisfactorily tested, the Double Harpoon Power Fork, manufactured

by the Pennock Manufacturing Company, of Kennett Square, Chester Co., Pa.

A Grass Seed Sowing Machine, with Wilkinson's Patent Wind Screen attached, was also exhibited by Jas. E. Wisner, of Friendship, N. Y.; it was attached to the Wisner Rake, which was awarded the gold medal. The seed sowing machine, worked on the Wisner Rake, was manufactured by Bickford and Huffman, of Macedon, N. Y., who also have the agency for the Wind Screen, which is designed to, and does thoroughly protect seeds and fertilizers from the action of the wind whilst they are falling from the machines to the ground. It is an inexpensive affair, and was considered by all who saw it very effective and valuable. J. Wilkinson, of Baltimore, Md., is the patentee.

The weather was seasonable and very propitious, and every requisite for properly conducting the trial was supplied by the committee of arrangements.

The exhibitors and the judges felt that they were very fortunate in finding a farmer like Wm. T. Painter, who not only had on his farm all the necessary requirements for the trial of the machines, but who also had accommodations sufficiently spacious for their comfortable entertainment, although we numbered a score or more. The hospitality and kindness of Mr. Painter, and his lady and family, was a matter of daily remark by their numerous guests, and will long be remembered.

The Judges adopted a scale of merit in their endeavor to arrive at the comparative excellencies of the machines tested, in which 40 was the highest standard, 30 the mean, and 20 a grade so low that it was undeserving of notice. By this system the following awards were made:

### DECISION OF THE JUDGES.

*Combined Machines as Mowers.* Russell's Peerless, 33.55; Hubbard Pony, 35.18; Meadow Lark, 37.38; Keystone Combined, 33.69; Buckeye Combined, 33.77; Dodge Combined, 31.80. Gold medal to the Meadow Lark; silver medal to the Hubbard Pony; bronze medal to the Buckeye.

*Mowers Only.*—Buckeye, Jr., 31.15; W. A. Wood's Eagle, 34.30; Eureka (Rochester), 30.70; Eureka (Towanda), 33.10; Meadow Lark Mower, 34.65; Screw Mower, 36.10; Keystone Mower, 31.25. Gold medal to the Screw mower; silver medal to the W. Anson Wood; bronze medal to the Meadow Lark.

*Reapers.*—Peerless Combined, 33.75; Hubbard Pony Combined, 33.50; Meadow Lark Combined, 33.50; Keystone Combined, 32.87; Buckeye Combined, 36.25; Dodge Combined, 34.75; Gold medal awarded to the Buckeye Combined; silver medal to the Dodge; the bronze medal to the Peerless.

*Tedders.*—To the Rev. J. M. Burdick, of Elizabeth, New Jersey, for Burdick's Patent Hay Tedder, was awarded first Premium. To the Higganum Manufacturing Company, of Higganum, Conn., for the "Super-



rior," second premium. To Nash Bros., Manufacturing Company, Church street, N. Y., for the Bullard Patent, third premium.

**Rakes.**—To John Dodd & Co., of Dayton, Ohio, for Wisner's Patent Self-Discharging Rake, first premium. To W. H. Fields, Port Chester, N. Y., for Wisner's Patent Hand Lever Rake, second premium.—To Coates & Gray, of Alliance, Ohio, for their Patent Lock-Lever Hay and Grain Rake, third premium.

**Horse Hay Forks.**—To the Pennock Manufacturing Company, Kenne t Square, Pa., for Harris' Patent Double Harpoon Horse Hay Fork, first premium.

#### DYNAMOMETER TESTS.

The instrument used to weigh the draft of machines was a very superior one, invented and manufactured by Mr. Baldwin of Jersey City, who was present, and kindly personally conducted all the experiments under the direction of the judges.—The result attained in mowing was as follows:

Machine.	Draft when Cutting.	When not Cutting.	When out of Gear.	Width Side of Cut.
Russell's Peerless.....	180	87½	70	7.....4.3
Buckeye Mower.....	162½	91	75	7.....4.1
W. A. Wood Mower.....	170	80	65	12.....4.3
Rochester Eureka.....	207½	100	55	0.....5.6
Towanda Eureka.....	194	92½	57	0.....5.0
Meadow Lark Mower.....	184	82½	65	9.....4.0
Buckeye Combined.....	176	95	74	4.....4.1
Meadow Lark Comb'd.....	187½	78	64	9.....4.0
Hubbard Pony do.....	202½	82½	70	14.....4.6
Screw Mower.....	172½	97½	76	7.....4.3
Keystone Mower.....	181	85	60	10.....4.6
Keystone Combined.....	209	96	70	4.....4.6
Dodge Combined.....	265	159	77	11.....4.6

#### THE REAPER TRIAL.

The practical test of reaping machines took place on Thursday afternoon in the wheat field of Joseph Darlington. The field contained about nine acres, with the grain of moderate size and standing up very well. The surface was quite rough, and not very well suited for the easy working of the implements. The plan pursued was to test each machine first with the dynamometer, with the cutters both in and out of the grain. After the amount of draft in these respects had been settled, each machine passed once around the field, to enable the judges to observe the manner in which the grain was deposited by the rake. All the machines except one, the Buckeye, had rakes of the "pigeon-wing" description, of various patterns. The exception had the "Miller table-rake," which is attached to the platform, near the middle, and has its operations governed by an eccentric iron ridge or guide fixed on the platform. The work done by this attachment was decidedly superior to that of the other rakes, the butts of the grain being left square and straight. The result of the dynamometer tests of the reapers, in and out of the grain, was as follows:

#### DYNAMOMETER TESTS OF REAPERS.

Name of Machine.	Width of Swath.	Draft in Grain.	Out of Grain.	Side of Draft.
Keystone Combined, 5 ft.....	262	192	.....	4
Buckeye Combined 5 "9.....	182½	192½	.....	14
Dodge Combined 5 "0.....	240	180	.....	3
Hubbard pony comb'd 5 "0.....	250	182	.....	6
Peerless Comb'd 5 "0.....	252½	187½	.....	18
Meadow Lark Comb'd 4 "6.....	225	160	.....	6
Meadow Lark, 1 horse 4 "6.....	226	160	.....	7

The trial, which was most creditably conducted,

was by a Committee of Arrangements, selected from the members of the Chester County Agricultural Society.

#### COMMITTEE OF ARRANGEMENTS.

Samuel Pennock, (Kennet Square,) *Chairman*; Wm. T. Painter; Wm. W. Parker; Mark J. Cox; D. H. Branson; Alfred Sharpless.

#### JUDGES.

Thos. J. Edge, of Chester County Pa.; Hon. Hiram C. Hoover, Montgomery Co., Pa.; Henry T. Darlington, Bucks Co., Pa.; Thos. Baker, Lancaster Co., Pa.; E. G. Ridgeway, Delaware Co., Pa.; Geo. G. Lobdell, Wilmington, Delaware; Dr. A. L. Elwyn, Philadelphia, Pa.; Prof. J. Wilkinson, Baltimore, Md.; Chas. Satterthwaite, Mercer Co., N. Y.

#### Disappointed in California.

At a meeting of the Western New York Farmers' Club, 3d of June last, a Mr. Culver, who had been travelling extensively in that State, was called upon to give his impressions of California.

Mr. Culver stated that he was really disappointed in California. It was not so much of a farming State as he had been led to suppose, and was very poorly adapted to grazing. Not one acre in twenty is tillable. One crop of wheat in four fails.—They raise no crops without irrigation. They give their flocks and herds great range. It takes ten acres to keep a cow. Grass will grow only by irrigation. Thinks there is more grass on 100 acres in New York State, than on 10,000 acres in California. Have dry rivers, only filled when the snow, always visible on the mountain tops, melts and flows down into the valleys. When a farmer can dam up this snow water, and keep it for irrigation, he raises large crops. Some of the valleys are very rich. Had seen where they were washed out to the depth of sixteen feet, and the black mold extended to that depth. They plow there with gang plows, and only to the depth of about three inches. But very little timber, and that in the northern part. California wine is flat, and like the California fruits, lacks flavor.

**OIL** and repair the harness. Unbuckle all the parts and wash clean with soft water, soap and a brush. A little turpentine or benzine will take off any gummy substance which the soap fails to remove. Then warm the leather, and, as soon as dry on the surface, apply the oil with a paint brush or a swab. Neatsfoot oil is the best. Hang up the harness in a warm place to dry, but do not let it burn.

Earn your money before you spend it.



## TO DESTROY WEEDS.

From "A Manual of Weeds, or the Weed Exterminator," by Dr. E. Michener, of Chester county, Pa., we extract the following:

"The sagacious reader will perceive that pestiferous weeds, most difficult to exterminate, which reproduce by rhizomes (root stocks,) are far more annoying to farmers and difficult to contend against, than those which reproduce by seeds.

"Rhizomes of every form, are very tenacious of life, and will generally bear a great deal of exposure, before they will perish.

"Bulbs, and tubers, are almost as retentive of their vitality as seeds, and nuts.

"*Rhizomes* proper, being well provided with buds and mostly very friable, are readily broken into fragments, when each piece which retains a bud soon vegetates, and forms a new plant like *Cirsium*, or *Canada thistle*.

"*Bulbs*, annually, form a corona of small *bulblets*, around the parent like *Allium*, or *garlic*.—These bulblets are easily separated and dispersed, where they speedily form new plants.

"*Tubers* are sometimes produced even in much greater abundance (*Cyperus*, or *Coco grass*.) From a kindred species of *Cyperus*, I collected 500 tubers, which were about half of the annual product of one such tuber, planted in the spring.

"A few general propositions of a practical character may not be out of place, in relation to weeds in general; but more especially to those of the present division, (*Biper-annuals*.)

"1. Never permit a noxious weed to mature and sow its seeds.

"2. Whenever the *leprosy spot* appears, no matter whether it is measured by inches or by acres, immediately circumscribe it in such a way that no process of tillage, no agricultural implements, or other means can carry its roots into healthy ground.

"3. Whenever practicable, thorough hand-digging and the destruction of the roots should precede all other operations. Carefully watching for and promptly removing any remaining plants, as soon as they appear.

"4. Vegetable physiology teaches, that the leaves of plants are the essential organs of digestion, assimilation, and respiration. They are the vitalizing, life-sustaining organs of the plant. Hence it follows, as an obvious *corollary*, that the leaves, as they are the most accessible, so they are also the most *vulnerable* parts of the organism, and presents a favorable point for the farmer to commence the work of extermination.

"5. Prevent the formation of leaves, and the vital functions will soon cease to be performed.—Arrest the vital functions and the root will perish. This is the grand arcanum for the destruction of pestiferous and highly vitalized weeds.

"The following extract is worthy to be remembered by every farmer, from Caleb N. Bement:

"By whatever means the foliage, or leaves and stalks of the plant, are continually and frequently destroyed, for one season or two at most, during the months of June, July and September, will destroy the *Canada thistle*.

"It is a settled principle in physiology, that leaves are as essential to vegetables, as lungs are

to animals; and that without the healthful exercise of these organs, both the vegetable and the animal will become diseased and ultimately die.—Leaves are as necessary to the roots of plants as roots are to the leaves. They are mutually dependent on each other, and one cannot long exist without the other. The repeated and complete defoliation of a plant, therefore, must soon be fatal to the roots, and an effectual mode of eradicating them."

"There are various means which may be resorted to for preventing the formation, or reproduction of leaves. These should be selected according to their adaptability to the circumstances of each particular case. They are:

"a. Garden culture. Hand-weeding, and the hoe.

"b. Farm tillage. With plow, harrow, &c. Frequent stirring and thorough pulverization of the soil.

"c. Suffocation. By poisonous applications.—By heavy mulching with straw, bagasse, spent tan, &c., &c.

"By high farming. Which means, heavy manuring, good tillage, and the production of an abundant growth of the grain and grass crops, so as thereby to smother out and suffocate all worthless and pernicious products.

"Other subordinate means should be resorted to, as circumstances may indicate, some of which will be noted in the progress of the work.

"When by watchful attention and persevering industry, the offensive weeds have all been extirpated, a *truce* has been obtained, but the *victory* may not have been fully achieved. The soil may have been filled with the seeds of preceding years, which will very likely vegetate, and cause renewed trouble, as the processes of tillage bring them successively to the surface, where they can feel the vitalizing influence of light and air. Hence, the necessity for continued watchfulness and prompt action, so long as the danger exists."

FOR CURING BEEF AND HAM.—One of our subscribers, Benj. Shepherd, near Bridgton, N. J., has practiced the following receipt for curing beef and hams, for the last forty years, without a single failure:

For every 100 lbs. of beef, 7 lbs. of salt: 2 oz. of saltpeter: 1½ lb. brown sugar; 4 gallons of water. Boil and skim and pour over the meat when cold. If properly packed, that amount of water will cover the meat.

For pork, pack the ham and the shoulders together, to every 100 lbs. take 8 lbs. of salt; 4 oz. saltpeter; 1½ lbs. sugar; 4 gallons of water.

The hams and beef for drying may be taken out after 4 weeks. To keep the meat after warm weather, the pickle will have to be boiled.—*Practical Farmer*.

BEST FOOD FOR A BROOD MARE.—The *Live Stock Journals* says:—It is only necessary to keep the mare in fair condition until about a week or so before foaling. Then would advise you to give her a laxative food, such as bran mash, with a handful or two of corn meal mixed in.

## POTOMAC FRUIT GROWERS.

JULY SESSION, 1874.

The Society held its regular monthly session at the Board of Trade Rooms, in Washington, D. C., at the usual hour, 12 o'clock M. Chalkley Gillingham, President; D. S. Curtiss, Secretary.

Notwithstanding the busy season, the meeting was well attended, and one of the most interesting and profitable the Society has ever had.

After disposing of various accounts and some business Committee reports—

On motion, the Secretary was authorized to send proceedings was authorized to send proceedings of our meetings to Horticultural and Agricultural papers and Societies, hoping for an exchange and interchange of correspondence and documents.

The Secretary of this Society would be pleased to have correspondence and interchange with Societies and the friends of the cause, in all sections.

## BIRDS—INSECTS—POISONS.

Dr. Jehu Brainerd alluded to the potato bug and other destructive insects, and said it had become common to use poisonous drugs, as arsenic, Paris green, &c., for the destruction of predatory insects, and he raised the question whether the use of those poisons for that purpose on food-producing plants would not be dangerous to life or health. It was his opinion the practice should be discouraged as a dangerous one.

Major King, thought poisons could not be taken up by plants in sufficient quantities to be dangerous or detrimental.

Others expressed opinions on the subject *pro* and *con*, when it was referred to the scientific committee for consideration to report to the Society.

Dr. Snodgrass stated that the sparrows were doing a good thing in the public parks by destroying worms and insects among the trees.

Maj. King put in a plea for our song bird and others.

D. O. Munson, of Falls Church, Va., stated that Caterpillars will infest some sorts of Maple, but not the Silver and Sugar Maples.

Capt. Smith reports that the Crows are doing a great work in quickly and completely killing and clearing away the potatoe bugs, making clean work of them.

Dr. Brainerd said that the guinea fowls eat and clear off the potato bug very readily wherever they have a chance.

Capt. Smith kills off and rids his trees of the caterpillars by singeing them with a kerosene lamp or torch—holding the blaze under the webs. He cleans his own trees and then goes to his neighbors and does the same, and without the least injury to the trees or fruit.

Other members suggested other modes, as soap subs, wood ash ley, &c.

Earnest and general pleas for preservation of all the birds were urged by members, and the guinea fowl and turkey highly praised as insect destroyers and field and garden cleaners—especially the tobacco field and potato patch.

## FRUITS AND HEALTH.

Dr. Snodgrass, was invited to read a paper, at a future meeting, on the relation of fruits to health.

On motion a committee was appointed to review

the fruit list for this region, and C. Gillingham, D. O. Munson, Wm. Saunders and N. W. Pierson were appointed said committee.

## PRINCE GEORGE'S CO.

Dr. Jehu Brainerd gives notice that the Agricultural Society of Prince George's county, Maryland, have purchased a 200 acre farm for fair grounds and a model farm, and have invited the officers of the National Industrial Institute to confer and co-operate with them to morrow, at Magruder's near Wilson's station, on the Baltimore and Potomac Railroad.

It was also moved that this Society also appoint a committee to meet in the same conference, which was passed, supported by Messrs. Curtiss, Hopkins, King, Clarke and others, when the Chair appointed as said committee Messrs. King, Snodgrass, Hopkins, and Curtiss.

Col. Curtiss stated that Dr. Brainerd had generously proposed to make a free gift of 50 acres of valuable land near Bladensburg to the Trustees of the National Industrial Institute, for a model and experimental farm, if they would raise the means to put up suitable buildings to accommodate the students. He spoke of the great use and merit of such a scientific institution, as did some other members.

## FRUIT PROSPECTS.

N. W. Pierson wished to inquire in regard to the prospects of the apple and peach crops of different members. He said in his region there would be few peaches. The president gave the same opinion.

With Mr. Munson some varieties would give a fair crop, as Hale's, and some of the yellow sorts.

Capt. H. D. Smith, of Arlington, said he should have a fair crop of Hale's Early and Scott's Nonpareil. He was not raising tomatoes as heavily as last year.

Major King said his quinces were falling off—infested by worms.

After a most interesting meeting, and mutual pledges by members to do what they could to build up and extend the usefulness of the society, it adjourned to meet on the first Tuesday of August, at the place, where all interested are cordially invited to be present and share the benefits of the society.

John T. Clark, Esq., of this City, one of our most successful amateurs in flowers and fruits, says.—My potato vines were literally covered with the insect, that is, what was left of them, one-third of which, at least, having been entirely consumed, when, on 20th. June I dosed them liberally with a mixture of Paris green and carbolic powder, in proportion of one-twelfth of the former to eleven-twelfths of the latter, and, in one week, after a careful examination of the vines, not one live insect could be found in the entire patch. I am firmly convinced that the carbolic powder of itself will suffice for their destruction. I notice, in other portions of my grounds, where the mixture has not been used, a few of these insects, who do not confine their destructive qualities to the potato alone, but take in their way every vegetable product.—Even the plants in the flower garden show their attack, and the roses particularly have suffered.—One application of the mixture has likewise afforded relief in their latter attacks. LAND MARK,



## ESSAY.

READ BEFORE THE KENT COUNTY (MD.) AGRICULTURAL CLUB, BY WILBUR C. STEVENS, OF KENT COUNTY.

If planting a seed of a variety of Peach to get a root stock that would give to the budded tree and fruit some quality possessed by the seed, were a remedy for the failing quality and peculiarity of some varieties of peach, a necessary inference would be, that the budded fruit would, through the root, partake of the nature of the seed. Now, the office of the root is not to impart its essential elements, or any of its nature to the plant to which it belongs, nor to the plant to which it helps to supply food. But simply by absorption, blended with the energy it exerts on the soil to supply nourishment for the growth and development of the tree and fruit. Hence, to my mind it is evident that it has no power to stamp its character upon the fruit. Of course, a tree to be vigorous, needs a healthy root—just as man requires a good sound stomach to be a healthy man. In fact the stomach of man is analogous to the root of a tree. If this stomach is healthy, and a man requires food adapted to promote activity of brain, and to support this activity, food of a phosphatic character, such as bread made of wheat, bran and all—some varieties of fish and calves brains—if fat is needed, food of a character to produce fat—if animals, vitality is wanted, beef and food of that character is required, and so on. Now, if a tree needs something to make its fruit firmer, perhaps common salt and potash, if the soil is not too light, is the proper food for the root. If the tree wants vigorous growth and dense foliage, some of the salt of Ammonia is the proper food, and so on, can this analogy be traced; providing always that the root is healthy and the stomach good. Now, to get a good strong healthy root and stock, the first requisite is good seed, then good ground and wholesome cultivation. We all know the value of selecting good corn or wheat for seed, and the failure attending even good seed, if the ground be poor, and the cultivation imperfect. As it is unreasonable to expect good results from bad seed and careless cultivation with corn, how can we expect a good root stock without the same care. As an inference from this is, that a budded fruit seed, as well as a natural seed, will produce a good stock if other things are equal.

I met an intelligent agent of a Chester county Pennsylvania Nursery, who informed me that they were very careful to get good root stocks to bud to—their method is to plant the seed as we do corn, and cultivate both ways, and when the stock is a certain height, to cut it back, thereby making it stouter and stimulating root growth—to this stock they apply the bud, the consequence, a fine vigorous tree. Again, if breeding in and in as we term it is a cause of general deterioration—as I am convinced is a fact—planting a seed of some variety of peach to get a stock to which to bud the same variety, is only a breeding in and in process, applied to both ends. To illustrate this more fully—take the dwarf pear, on the Angiers Quince root stock. Now the root of this Quince acts on the soil in such a way and absorbs food so slowly, its structure being different from that of the pear root,

that the tree cannot attain the size of a pear tree supported on a pear root, and nourished by it, but the fruit is pear, not quincey in the least, but as perfect a pear as a standard of the same variety. What do you suppose would result from planting a seed of a dwarf pear. Surely not a dwarf pear tree, let the fruit be what it would. As to the change of time of ripening of the Health Cling, I attribute to climatic influence. To make it later ripening get the trees from the South where the season is longer. To make a variety earlier, go to the North for trees. Now we are in the habit of planting from our own State and Delaware—as a consequence, acclimation is making this peach earlier and earlier. This principle is illustrated in every direction. There is an old early variety of Early Indian corn, that was introduced into Canada and Virginia at the same time. In Canada, after a time, this corn ripened in a few weeks, while in Virginia the period of ripening got later. Now, this corn, when taken to the New England States from Virginia, would not ripen at all—the New England Summer being too short. Rice, a Southern plant, became gradually introduced as far north as New Jersey. The Horse Chesnut, from the tropics, is another instance.

“As breeding in-and-in is certainly productive of bad results,” we need a remedy, and the only one that presents itself is to go back to the seed. Take a seed of the variety we want and grow the tree from it without budding at all—I am well aware that our grandfathers transmitted to us the notion that a seed from a budded peach produces another variety. Now, a peach is not a hybrid, as I heard asserted here last Monday. If it were a hybrid in the true sense of the term it would of course be useless to depend upon it—it is simply a cross between varieties of peach. To get a hybrid it would be necessary to mix the peach pollen of the blossom with another species, closely allied to the peach—the Almond for instance. If you could mix these two members of the same Botanical family you would get a hybrid. Well, as the peach is a cross why can not we get its kind from the seed? We would have to adopt the plan of the Nurseries in keeping their seed pure. Now, Mr. Gregory, of Marblehead, Massachusetts, is quite a Squash man. He has the Hubbard Squash and the Early Bush Squash, but to prevent these two kinds running into some other variety, each seed bed is so far from the other that mixing is impossible. Now, why is not the peach subject to the same law. We get corn from the seed, crossed corn, too. The Trophy tomato is a cross; we get it true. So is the New Jersey Wakefield cabbage, and so are a great many other crosses. I have a variety of fowl—a cross between the Poland and Dorking—I mean the Houdan—now, I get neither Polands nor Dorkings from the eggs, neither do I get anything but Houdan, having every characteristic of the Houdan from its top knot down to the color and size of egg. Now, I maintain that everything is true to its kind, if proper care is taken to prevent mixing males of one variety with females of another, through the pollen of plants or the semen of animals. If this view be correct the remedy very readily presents itself not only to prevent degeneracy, but to improve, as you go along, always being careful to select the seed of the best fruit and occasional cross with our neighbors.



# HORTICULTURE.

## COLUMBINES.

Among the best known plants are the Columbines. For numberless years they have been under cultivation. They grow so easily, and take such

for fifteen years; and no doubt some would last much longer than this.

While some tribes of plants seem to vary very little, even with great pains to make their start into varieties, others show an aptness for wander-



COLUMBINES.

good care of themselves, and yet do not extend themselves so rapidly as to become a nuisance, that old as it is it remains, and probably long will remain, a general favorite. We have known stocks of columbines to remain in one place in the garden

ing, either by varying naturally, as they say, from an inherent disposition to change, and also by cross fertilization between the different varieties. The common form in cultivation is the *Aquilegia vulgaris*, which is a native of Europe, and has

given many varieties, double and single, and of various shades of white, blue and rose.

The Columbine of Eastern America, *Aquilegia Canadensis*, is really a more beautiful plant than the European one, but has attracted somehow no attention from cultivators. Very nearly the same kind is found in California, and some closely allied species in the north of Europe. Recently attention has been called to the American Columbines, through the discovery of some beautiful ones in the Rocky and Wahsatch Mountains.

The Rocky mountain Columbine is the *Aquilegia carulea*, and has very large blue flowers shading so near white in the centre. It grows high up on the mountains, but has been found of easy culture here in the East and has during the few past years, got into many collections. The Wahsatch Columbine grows in the southern part of the mountains of that name, and extending into Arizona and western Texas. It is a bright golden color, and has created considerable attention from English florists on account of the very novel color in this genus of plants. It is known as the Golden Columbine, *Aquilegia Chrysantha*, and is the one of which we give an illustration with this. Besides its golden color, it is very striking from the very long spurs, as represented in the cut.

With this addition to the list of colors, we shall soon probably have our enterprising florists giving us as many striking improvements as already exist in no great a number of families of plants, and which do not take half as little care as this popular old favorite.

#### FRUIT CULTURE AND INSECTS.

It is very common for our agriculture to deplore the annual increase of insects, which they say make the battle in fruit culture much more severe than formerly, but our best entomologists, after giving the subject every attention are satisfied that really it is just about the same. There has been no material increase, nor is it likely that the nuisance will ever be abated. It is much the same as it always has been, and as it has been it will likely be forever. It is gratifying that we know the worst at any rate, and that whatever troubles we have in fruit culture, insects will never be worse than now. The idea that they have been badly increasing of late years has originated from the opening up of new localities to fruit culture. Insects as a general thing feed only on certain kinds of vegetables, and do not exist where these kinds are not. When fruits are introduced for the first time to a new place the insects are not there to attack them; but they follow them in time, and become just as an-

noying, but not more so, as they have been elsewhere. In the Western States there were thus no insects at first, but insects follow in time, and there is not now in the west any location especially favored, though of course comparatively new spots, like much of Kansas and Nebraska, are as yet less free from these pests than we are, and so can generally beat us in the annual fairs and exhibitions.

It was thought at Salt Lake City and other spots in Utah, where the cultivated grounds are so completely cut off from the rest of the world, there would be perfect immunity from insect pests, but even there the codling moth has arrived, and already it is almost as much trouble to raise apples as any where east.

While it is certain that we know the worst in regard to insects, our knowledge of them, and how to attack and destroy them will advance, so that even from the insect point of fruit culture there is everything to encourage us.

#### CULTIVATING ORCHARDS.

In many of the States there are meetings of Horticulturists to discuss the best methods of fruit culture and any improvements connecting therewith. At these meetings there is sure to be a discussion as to the proper methods of cultivating orchards, some contending that it is best to keep them in grass, and others that it is better to keep the surface clean by growing hoed crops, such as potatoes or corn through them, while some contend for a clean surface—nothing whatever being allowed to grow but the trees themselves. It is difficult for any one to judge from these discussions which is the best plan. All advocates seem to have had fair and some excellent success on all sides; while there are some, and these are the major part, who find on whatever system, or rather lack of system, they adopt, it is of far more consequence to see that the trees do not lack food, and in the case of the apple especially, to take care that borers do not make a home in the stems. No one would think of growing corn or potatoes without manuring, and yet thousands never think that a tree is but a vegetable, and like other vegetables must have food also. If the tree has all the food it needs it will not mind how much other crops growing with it gets. A fruit tree is not of the dog in the manger class of organisms. If plenty of food be given, it will not make much difference whether grass, or corn, or potatoes be grown with the trees, but if there is not enough food already for them, it is folly for the owners to divide the little they have with other crops.

## REGULATING FRUIT PRICES.

It is notorious that it is only now and then that fruit growers make extraordinary profits; the seasons when they have heavy losses are as numerous; and these extremes make the business very much of a lottery. It would be an excellent thing if any plan could be devised whereby a certain and moderate profit could always be had; but we presume most growers would rather take their chances of losses for the once in awhile prize, than be trammelled by any combination. It is however discussed in some quarters whether something of this kind cannot be done. A Mr. Babcock recently endeavored to secure the co-operation of the fruit growers about Syracuse, New York, to regulate prices there.

This gentleman proposes the election of a committee of six of the leading producers, whose duty it shall be to meet weekly during the fruit season and in conference fix the price for the coming week; also to watch the market, and the supplies received from other quarters, which might suddenly change values, and to notify the home growers of the fact by posting the information at a central point to be agreed upon, so that they may guide themselves accordingly. The plan was favorably received and discussed. The object of this supervision was declared to be for the mutual benefit of growers, dealers and consumers. The plan is to be further considered before any decisive action is taken.

## THE NEW RASPBERRY BORER.

A new enemy to the Raspberry has been discovered by Mr. C. V. Riley, the State Entomologist of Missouri, which bores into and feeds on the stems much as the peach borer does. It is indeed closely allied to it, the peach borer being the *Agaveia exitiosa*, and this new moth being *Agaveia rubi*, or raspberry root borer. Though the name and description is by Mr. Riley, the specimens were sent to him from the East. So far we have not heard of much damage from it; but no one knows when it will be the cause of serious trouble. These things usually increase in proportion as their sources of food increase, till in time they interfere terribly with the operations of the fruit grower.—It is best for people to learn in time the nature and character of the enemies with which they are likely to contend, as very often they can then destroy them on their first appearance, before they have attained the force of numbers.

This borer is closely allied to the peach borer; indeed some cultivators appear to have taken them for the same; but Mr. Riley says one kind never feeds on the trees of the other, and besides he shows that they are quite distinct.

## BUDDING ROSES.

People often ask what is the time to bud roses; but there is really no special time, except when the wood is ready—as a general rule this in the middle States would be about mid-summer; but yet when growth is favorable it may be done almost up to frost. Under glass, florists bud roses any time through the winter, when the growth in a warm green-house is favorable. It is essential to get healthy wood to get the grafts from, and healthy stocks to put the grafts on—for budding is but a form of grafting. The buds are ready when the wood has grown and nearly matured, which may be known by the leaf being nearly ready to fall, and the bud in the axil of this leaf full and well developed.—The stock should be vigorous in its growth, and be also near mature, but not so much mature that the bark will not move freely from the wood below.—The proper place to insert the bud is about where the young leaves have matured, and are nearly ready to fall off. These are the chief essentials to successful budding.

Budded roses however are not popular; but this is chiefly because people who have had them from the florists did not know they were budded. In this case a good strong sprout comes out below the bud, and the owner is much pleased at the vigor displayed. But in time it brings but a single rose instead of the beautiful double flower expected, and hence there is a natural feeling against such swindling things. If one only knew of the rose being budded, of course it would be a simple thing to take the sprouting suckers off.

Budding has too many advantages for it to fall wholly into discredit. If one has a new kind which they desire to increase rapidly, there is no plan so good for the increase as to bud it on another kind; and then weak roses grow so much better on a stronger stock. It is wonderful what a difference this makes. Some people who make a business of growing roses for exhibition graft them on purpose to get from them flowers of the very highest excellence. All that is needed is to look well to the suckers, as the sprouts below the budded part are called.

THE SUNFLOWER—"WILSON" RECEIVES HALF A BUSHEL.—Mr. J. P. Armstrong, an enterprising farmer near Centerville, in this county—says the *Marlboro Gazette*—has sent us near half a bushel of sunflower seeds for distribution. He has tried the sunflower a number of years, in several locations, and finds it a preventive of chills and fevers. Though the chills are "no great shake" just about here, yet it would be well to try the experiment.

[May-be a little *Horsey* would act as well, Eh?]



### NATIVE PLANTS FOR ORNAMENT.

Horticultural journals are continually discussing whether preference should be given; to foreign plants over native ones in our gardening work; and this reminds us of a friend who last year made a considerable sensation, by placing in a conspicuous place on the best kept portion of his lawn a plant of the common lance Thistle—*Cnicus lanceolatus*. Now this is not exactly a native plant, having become a farm weed through an introduction from Europe; but it serves to illustrate the idea of native or wild plants. This thistle on the lawn was one of the most striking objects possible, and as rich manure was placed in when the thistle was planted, and the soil rather damp, its usual character was so changed, that friends thought a new and very rare plant was being grown. It made an orate growth of some three feet high by two wide, and as perfect in outline as if it had been sheared. In the autumn its full heads of rosy pink flowers were particularly beautiful. Of course some care had to be exercised to prevent the downy tailed seeds from blowing away; but this thistle not being a rooter as the Canada Thistle is, does not spread to much injury—indeed is generally found only in waste places about cities, or in neglected spots about farms, where these beautiful wild plants might perhaps be as well as anything else.

However, our object is not to recommend this plant or any other one particularly for cultivation, but to show how even wild plants may be so taken in hand and grown, so as to change their character completely, and make a thing usually regarded as only common place, one to be regarded with admiration by everybody.

It need not take a fortune to make ones place beautiful. The materials are everywhere. It is simply good judgment that is not cheap.

### Winter Flowering Lily of the Valley.

Though seeming to grow so easily in the open ground, and to take care of itself so well, there are few things more difficult to florists than to flower this plant in the winter time. At the same time it is one of the most desirable plants to have, and florists use their best endeavors to have them.—Mr. Vick gives the following as his experience of the best way:

It is scarcely time to talk about Winter Blooming Flowers, and yet for fear the next number of the Guide, which we design to devote mainly to this subject, should be over crowded, we propose to introduce now to the attention of our readers a sweet little flower admirable adapted for this pur-

pose; and yet we seldom see this little favorite, even in large collections. One reason of this we suppose, is that its management has not been generally understood. A portion of the buds produce only leaves, and, of course, if these are planted disappointment is the result. Florists now keep for sale well matured buds, or pips, as they are called. They can be purchased for about one dollar a dozen, or rather, brought right to your Post Office for that price. These may be planted from three to half a dozen in a pot, according to its size. Keep them in a tolerably warm place, never allowing them to suffer for water, and if somewhat dark, just as well for a week or two. Then bring them to the light. In about four or five weeks from potting flowers will be produced. By placing a little moss around the lower part of the pips, and then planting them, they can be grown in boxes by the dozen, and then remove to any fancy pot, or basket, or vase, where it is desirable they should flower. Indeed, they can be grown in moss entirely, just as well as in earth, as they make little or no root before flowering. and, of course, can be put into glasses of water, and, in fact, be handled as they are about to come into flower in almost any way to suit the convenience of the grower.

As the pips are not injured by frost, and are small, they can be sent by mail with safety any time during the winter, and by procuring a dozen and making four plantings, two weeks apart, flowers can be secured during a long season. Keep the pips in a cool, moist place until planted, covered with moss or saw-dust. We had almost committed the unpardonable offence of closing this article without stating that the true name of the Lily of the Valley is *Convallaria majalis*.

### Care of Gold Fish.

The *Rural New Yorker* replies as follows to a correspondent who seeks information as to the care of Gold Fish: Seth Green is reported to have given the following directions for the management of gold fish:—Use any well, creek or river water that is not impregnated with mineral. Change the water when the fish come to the top and stay there and breathe part water and part air. Take out nearly all the water, leaving enough for the fish to swim in, and fill the vessel with fresh water.—Never take the fish in your hand. If the aquarium needs cleaning, make a net of mosquito netting, and take the fish out in it. There are many gold fish killed by handling. Keep your aquarium clean, so that the water looks as clear as crystal. Watch the fish a little and you will find out when they are all right. Feed them all they will eat and any-thing they will eat, worms, meat, fish wafer, or fish spawn. Take great care that you take all that they do not eat out of the aquarium. Any decayed meat or vegetable in water has the same smell to fish that it has to you in air. If your gold fish die, it is attributable, as a rule, to one of three causes—handling, starvation, or bad water.

### The Raising of Pears—Shall the Ground be Cultivated?

It has been held as a principle in fruit culture, by many, that the ground of orchards should be plowed and cultivated once or twice a year, or plowed or rooted up by hogs, if no crop is planted; for young orchards has this process been especially recommended, and we believe in the plan, particularly for young trees: if the land is rich enough for both trees and clover, we do not consider the raising of the latter in an old orchard as an objectionable practice, if the trees are properly pruned, fertilized with ashes, bone-dust and plaster, and washed once or twice a year with a saponaceous compound.

Our object, however, in this article, is to call the attention of our readers, many of whom we have no doubt entertain similar opinions to the above, to a recent discussion on Pear Blight, as reported in the Missouri Agricultural Report 1872, in which will be found much valuable information to all engaged in the pleasant and profitable work of fruit raising, for notwithstanding the delay and difficulties of the business, we believe, as a business, properly attended to, it is among the most remunerative branches of the agricultural art: it will be seen in the discussion that strong ground is taken against the practice of cultivating pear orchards.

MR. WOOD said he wanted to hear some experience on raising the pear, and in regard to the best varieties.

MR. RAILTON said, I have some 3,000 pear trees in my orchard in this (Cole) county. My trees were perfectly healthy until they commenced to bear; they then began to blight, and kept on blighting ever since, and I have never saved a tree once attacked. I am satisfied the blight is a fungoid growth or disease. In the spring of 1864 my trees suddenly began to look brown, and in three days the fruit (then the size of peas) commenced to fall off. Some of the trees died that season, and some seemed only partially affected, and lingered along; but, as I before stated, none once attacked ever entirely recovered. The same thing attacks and kills forest trees. My soil is a rich vegetable loam, with a clay subsoil, limestone bottom. My trees that are in grass do worse than those which are cultivated, although those that make the most vigorous growth blight the worst.

*Question.* Have you noticed if the seasons in which your trees blighted most were preceded by a moist, growing season?

MR. RAILTON. No, I think they were not. I have twenty-five varieties: of these, Onondaga and Bartlett blight badly; Seckel least of any; Easter Beurre, very badly; and Lawrence, bad, but least of any winter variety. I have now in my orchard 1,000 to 1,200 trees more or less affected with the blight, and only about 500 entirely free. The orchard was planted in 1859, 1860, and 1861.

I have in all 3,000 apple, 3,000 pear, and 1,000 peach trees.

MR. POWELL said he had two pear orchards: one in New York and one in Michigan. In the New York orchard are about 150 trees, and between forty and fifty varieties. I have never had a leaf blighted, even when my neighbors' orchards were burned to pieces. My soil is a heavy clay. I selected low-headed trees in the nursery, and kept them in hand; only plant standards, but head them low and keep them like dwarfs, so that I can go all over my trees without any difficulty, both to prune and pick the fruit. I do not cultivate my trees—keep them in grass. I believe that to be an essential requisite to successful pear culture. I fork a little around the trees each spring, mulch heavily and thoroughly and constantly. I lost the only trees I ever lost by blight once when I omitted to mulch. This point is important. By mulching you avoid extremes of temperature, or rather the effects of them, so that when a change comes the tree takes it more slowly. As to pruning, I thin out the weak shoots in summer, and cut back the tops of limbs, when necessary, in the fall, to secure only well-ripened wood during the winter; for I believe blight to be occasioned by frozen sap.

MR. HUSMANN said he had been growing pears for twenty-five years. When I commenced I had pears on rich land, and cultivated them highly; they grew fast, and as soon as they commenced to bear commenced to blight. I looked into the matter carefully and thoroughly, and soon became convinced that in order to raise pears successfully we must starve our trees; and the next pear orchard I planted and cultivated with this end in view, and I succeeded, and one of the regrets of my life is that I ever disposed of that orchard. It is a permanent income to the present owner. It consists of 900 trees—300 dwarf and 600 standard for market—and some 150 specimen trees for experiment. My trees were selected and grown with low heads. In this way a standard will bear as early as a dwarf, especially on poor soil. Standard Bartletts will bear the second year from planting, Beurre Bosc and Flemish Beauty the third, and nearly all the fourth year. Choose poor soil, plow deeply, get your trees with low heads, plant carefully, and give very little cultivation and no manure, and you need not apprehend much, if any damage from blight.

MR. POWELL: I am somewhat of an enthusiast in regard to pears. I believe they can be grown as well as apples. The Seckel and Beurre Clairgeau are perhaps least subject to blight. Flemish Beauty blights badly, owing to its rapid growth.—I take nothing off my pear orchard; it is in clover, and when the clover is cut it is left on the ground.

A general discussion took place, participated in by Messrs. Husmann, Mudd, Hall, and others, all seeming to agree in the main with the facts above stated.

MR. PLABODY said he had a number of trees in grass on the Jefferson county ridges, in heavy clay soil. I have no blight and very little growth.—Mr. Burrill, of Bailey's Station, who has the largest pear orchard in the State, planted in 1865 and 1866, has never got a crop; has suffered terribly from blight; some varieties are entirely gone; among others the Madeline and Onondaga. He



has some forty varieties, I think, and has cultivated his orchard highly. I have not seen it for the past two years, but he then told me he was entirely discouraged.

MR. HUSMANN: The soil has a great deal to do with it. The pear is as choice in soils as the Herbemont grape.

MR. MUDD: The trees in my yard, which are in blue grass sod and not cultivated, remain perfectly healthy. My sweet cherry trees are also healthy since I sodded around them, and boxed the trees on the southwest side to protect them from the sun. Have always had a crop of cherries since 1865, except when injured by frost.

MR. TRABUE: I planted seven acres in pears some years since one-half each, standard and dwarf; one-half the ground was planted in red raspberries, and well cultivated; the ends of the rows and a portion of the orchard is in sod; I have lost two-thirds of those cultivated; where not cultivated have not done well.

MR. PEABODY: Mr. Elliott, of Cleveland, has a very successful pear orchard; trees planted very close together; does not cultivate, mulches, and never disturbs the ground.

MR. STORM: My experience—which is only with fifteen or twenty trees, however—fully corroborates the statements made; my trees, which are in grass, don't blight.

PROF. RILEY: In some of the remark this morning, it was recommended to use the trimmings, brush, etc., as a mulch. I wish to caution the member's against this practice, as tending to propagate our insect enemies; also the root rotting and the paper fungus. Dwarfs are more apt to be attacked by the round-headed apple tree borer than standards, as the borer likes the quince; no insects which affect the pear have any connection with the blight.

MR. HALL: My experience in pear culture corroborates that given by members this morning. I have an orchard of several hundred trees that were planted in the sod, which was never disturbed, except by an occasional forking up of the ground for about two feet around each tree, and this spot was always kept thoroughly mulched; the trees grew moderately, bore in two or three years from planting, and none blighted, with but two exceptions—one Flemish Beauty and one Sheldon—both very strong growers. I disposed of the orchard, and the new owners commenced to cultivate it at once, and that very same year the trees commenced to blight, and have been blighting badly ever since. So far, my experience, as I have said, is the same as Mr. Powell's and Mr. Husmann's; but while my orchard was under this treatment, escaping blight, other orchards only a few miles, some only a half mile distant, with the same treatment, but on different soil, did blight, and blight badly. My opinion, based upon experience and observation, is that *both* proper soil and proper treatment are necessary to successful pear culture; neither will succeed without the other. I think the best soil a moderately rich soil, well under-drained, naturally or artificially, and a subsoil of such a character as shall allow the roots (especially of standards) to penetrate deep into the ground.

Save when you are young, to spend when old.

## Plant Trees.

Mr. Reuben Shelmandine, of Jefferson, N. Y., is evidently a philanthropist, and he proves his love for mankind in general by issuing a proclamation to farmers. Why he should embody a number of every useful hints about transplanting trees in this highly official document, we cannot explain. Suffice it that the writer says that he has had an experience of twenty years on a farm, and "not on a side walk," and that his remarks are practical. Transplant, he says, finest or standard fruit trees, some in the fall and some in the spring, until you have from 10 to 50 trees growing. No tree should stand nearer a building than twenty feet, and the trees should be about twenty feet apart throughout the entire grove or orchard. Establish forest trees along the road and the front yard, and fruit or forest trees on other sides of the house. Sugar maple, commonly named hard maple, is preferable of forest trees, and thrifty, hardy apples or pears, or both, of the standard (not dwarf) kinds.

Ornamental trees should be trimmed during the first few years, leaving the main shoot to form the trunk of the tree, in order to have the branching lower limbs of the final tree from six to seven feet from the ground. The land is such an orchard grove can be cultivated for all ordinary crops, including a garden, by plowing shallow and carefully near the trees.

It is suggested that the first ten trees be planted on the south side of the house, if none be there already.

If a wind break is wanted on the west, northwest, or southwest, plant as near together as possible and have a part of the trees evergreens, to complete the thicket. The forest and fruit trees, arranged about twenty feet apart, as above described, will be estimated by the owner or other persons at the expiration of five years from the time of planting to be worth at least five dollars each, and at the expiration of ten years at ten dollars each, with an increasing value thereafter.—*Scientific American*.

HOW TO TELL WHEN A MARE IS WITH FOAL.  
—For the benefit of "M. D." I give my rule for telling whether a mare is with foal: Take a rope, strap or string, and measure around the girth where the harness goes on the back and the belly-band buckles up; then measure again, just forward of the hind legs around the body; if larger around in the latter place than in the former, you may safely conclude she is with foal.—*Rural New Yorker*.

Never speak lightly of religion.



## DISSOLVING BONES.

A correspondent writes us on the subject of dissolving bones, as follows:

"I have gotten together about 3000 pounds of bones. I cannot ship them, and therefore desire to use them on wheat and grass this Fall. They must be dissolved of course, and combined with other materials to be made valuable. Will you please suggest what course to pursue?"

Break up the bones as fine as you can, with a sledge hammer or axe, where there are no mills to grind. Unless in small pieces they will be hard to dissolve. Get a tight cask or casks, put in the broken bones, with enough water to soften them. Then pour on sulphuric acid—it will take about 5 carboys of acid for the 3000 pounds of bones.—When they are dissolved and become like paste, add plaster to dry to a powder. Peruvian Guano is, of course, far better to mix with the dissolved bones than plaster, or any thing else. To the 3000 pounds of vitriolized bones we should advise the mixing of 1000 pounds of best Guano. But the manipulation should be well and carefully done to create a perfect admixture. To this might also be added 1000 lbs. of plaster, and the 4000 lbs. would be a nice dressing as a permanent fertilizer for ten acres, to be sown in wheat and set to grass, so to remain for two or three years, each year treated with four bushels of salt and one of plaster, per acre. We think at the end of that period the ten acres would be in a high state of fertility, besides, would have paid back the expense of the improvement in the hay and grass it had yielded. The sulphuric acid should be handled with care by the manipulator, to avoid accidents.

There is another method, a slower process, followed with success by many farmers who are in the habit of gathering the bones about the farm:—Take a water tight box or cask of a suitable size, and in the bottom put a layer of ashes, say three inches in depth, then on this a layer of bones, and so on alternately until the cask is nearly or quite full, the last layer of bones being well covered with ashes. Then have the family pour upon this all the urine from the house every day, and washing days pour on a quantity of strong soap-suds. In a few months this can be taken out with a shovel all dissolved, except it may be the large enameled joint bones, which may have to be broken and put through another sweat in the like manner. It is necessary the ashes must be good hard wood ashes, *unleached*, or the job will be a failure.

Thoughts come into our minds by avenues which we never left open, and thoughts go out of our minds through avenues which we never voluntarily open.

## ROTATION NOT A NECESSITY.

The idea of the importance of rotation of crops, so earnestly pressed upon the attention of farmers, has been of great service, both in its practical application and in the discussions evoked. It is being shown, however, that rotation is not a condition of success, except under certain circumstances.—Happily those circumstances are not universal, and in many cases may be either greatly modified or entirely changed.

Formerly, in localities where stable manure was very scarce as compared with the land under cultivation; when, from lack of capital or a disinclination to invest it, farmers depended for the most part upon the native energy of the soil, upon favorable seasons and good cultivation—a systematic rotation was of great importance, and still is essential to the best results. But in these days the conditions are changed; stable or no stable, there is potash and lime and phosphorus enough; rain or no rain, nitrogen is plenty. The soil is known to be a vigorous machine, capable of being unceasingly worked—not that feeble area that must be so carefully nursed in order to work at all. Hence he who still clings to the necessity of rotation, cherishes an expensive fallacy.

Numerous intelligent experimenters during the past twenty years have shown that by skillful use of chemical fertilizers and organic phosphates, which are most easily applied and very certain in their action, crops may be grown upon the same land for many successive years with unfailing profit. The field which for any reason is best suited to a certain crop, may thus be permanently retained for that specific purpose. Other parts of the farm will be assigned to those productions for which, as particular machines, they are best adapted. Also the expense of cultivation will then be lessened, as any one can see. Crops requiring laborious and constant attention will be accommodated in the most convenient parts, with no fear of rotation to an uncomfortable field.

Moreover, it appears that soils, if well fed, by constant cropping are somehow cleansed of their native crudeness, and rendered capable of producing much finer qualities of plants—notably of tobacco. Precisely why this is the case is not so apparent, but the truth can not be doubted. Now, when *quality in all farm products* is the inexorable demand, this deserves especial notice.

Years ago, the theory of rotation came as a god-send to stay the starving process that had ruined so many farms. Men heeded it to some extent, and saved their acres. Agricultural science has since made great advances. It clearly shows that rotation is not a necessity, but in many instances a hindrance, to a perfect crop.—*Country Gentleman*.

THE  
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**THE MARYLAND HORTICULTURAL SOCIETY**

Will hold its next monthly meeting in this City on Tuesday, August 18th, at 6 o'clock, P. M. at Lehmann's Hall, 277 N. Howard Street. Friends of the cause are invited to attend.

**EZRA WHITMAN, President.**

**T. C. DORSEY, Secretary.**

**The Horticultural Society of Maryland.**

The last meeting of the Horticultural Society, held on the 14th of July, at the elegant residence of the President, E. Whitman, Esq., was highly gratifying to the large number of members and distinguished visitors from the counties of our own State, and from other States. It was cheering to the success of this newly organized association.—The high character and position of those present, with the zeal they manifested gave unmistakable evidence of the great success which will in a short time attend this important enterprise, if persevered in. Its infancy has been as promising as any like association in the country, some of which have steadily increased in popularity, until after twenty to forty years, they have become a necessity to the States in which they exist, and are now wealthy enough to offer annual premiums, like the Massachusetts Society, to the amount of thousands of dollars for Horticultural productions. Many encouraging letters were received by the President of the Society from gentlemen of eminence and wealth, who could not be present at this meeting.

This was a business meeting, the proceedings of which are reported in this number of our journal. After the meeting adjourned, the company enjoyed the hospitality of the President, in the shape of a sumptuous collation, spread on handsomely decorated tables in the spacious verandas, which overlooked the beautiful grounds, and a large portion of the city. The gravity of discussion of the chief business of the meeting, was now succeeded by the "flow of soul," and gaily, wit and good fellowship until the twilight dews descended, when the company retired, each and all, looking forward to a happy re-union in September at the Annual Exhibition of the Association.

**Sowing Grass Seed for Permanent Pasture.**

A correspondent at Danville, Va. propounds the following, to which we subjoin reply:

"I have about ten acres in corn, which has been thoroughly cultivated and the crop is doing finely. The soil is a sandy loam, well drained; lies immediately on the river, produces corn, oats or wheat, and never fails to make a good crop. The ten acres I wish to seed down to grass for permanent meadow about the first of October. With the above facts will you furnish the formula? State distinctly the quantity and variety of seed to the acre."

For a permanent pasture we would recommend the sowing this autumn, on each acre, 1 bushel of Orchard grass, 1 gallon of Timothy seed, half a gallon of White clover, and 6 pounds of Kentucky Blue grass. In the spring sow 1 gallon of Clover seed per acre. The ground should be well prepared.



### The Maryland State Agricultural and Mechanical Association.

This Association will hold its Sixth Annual Fair on their Fair grounds, Pinlico, near Baltimore, on the 6th, 7th, 8th and 9th of October, 1874.

Much has been done by its energetic officers this year to make this coming meeting one worthy of the State and far excelling any former meetings of the association. The grounds will be put in complete order and the arrangements so altered as greatly add to the convenience of exhibitors and the comforts of visitors. The facilities of reaching Pinlico have been greatly increased, and but little or no inconvenience will be experienced by any number of visitors in reaching the grounds with dispatch and comfort. This has heretofore been the great drawback to the success of former meetings. Under a new organization of this Society, the present year, many very salutary and important changes have been made in its management, culculated to extend its usefulness and increase the interest which should be felt in its success by every agriculturist in the State. Its venerable President, A. Bowie Davis, Esq., has been indefatigable in his efforts to place the Association in the foremost rank of similar State Institutions, and we sincerely hope the farmers from every County in the State, consulting their own good, will rally to his call and be personally present, to welcome farmers from other States, in united efforts to advance the great common cause.

The Premiums are many and liberal, a list of which will be found in the present number of the Maryland Farmer.

#### Amsden's June Peach.

We are much indebted to Mr. L. C. Amsden, of Carthage, Mo., the propagator of this new Chance Seedling Peach, for some beautiful specimens of the fruit, and found it came up to his description fully; fruit medium size and round, color rich deep red in the sun. Flesh greenish white, very juicy, melting, sweet and well flavored. Stone small and fine grained. Freestone, adhering a little to the stone, said to be the *earliest peach in the world*. It ripens the last of June, and at least two weeks before Hale's early, which from our experience is the most uncertain of all peaches. The *Amsden June*, was so named by the Jasper County Horticultural Society of Missouri. It certainly is the best very early peach we even tasted, and its high color and perfect form is a great recommendation to it. It is represented as a good keeper, and the tree hardy and healthy. Our peach growers should test it.—It is fine, early fruit which pays the best.

### CHOICE BLACKBERRIES.

We acknowledge the receipt of five baskets of as many varieties of choice Blackberries, raised by John Cook, of Carroll, Baltimore county. Mr. Cook is one of the most successful cultivators of small fruit in our State, as every one will admit whose fortune it is to test their quality. The following is a list of the varieties presented to the *Farmer* office:

*Wilson Early*.—Very large; flavor rich and good; very productive; ripens very early, and matures the whole crop in about two weeks.

*Kittatinny*.—The berries are firm, of sweet flavor, and are perfectly ripe when they turn black; hardy and vigorous, very productive; continues four or five weeks in bearing—considered by many the best for general cultivation, as it bears enormous crops.

*Lawton*.—Large fruit, and very productive; juicy and sweet when fully ripe, at which time it is very soft. This berry is well known.

*Dorchester*.—Very early, high bush, prolific, excellent and hardy; valuable for home use; fruit crops in about two weeks.

*Chrystal White*.—Good size; superior flavor; uncommon in this latitude; attracts much attention in this market; a native of Kentucky—we rather took to this *white* blackberry.

Mr. Cook has in cultivation 5 acres of blackberries, comprising the five varieties above named, and has got them to a very high standard of excellence. On Saturday, July 18th, he brought to market 580 baskets, which averaged him 13 cents per basket. Those desiring stock are referred to his advertisement in this number of the Farmer.

### The Maryland Farmer.

A correspondent in Hampton, Va., an old subscriber, sends us his subscription for one year, and thus flatteringly speaks of our journal. We are in constant receipt of such favors but are too modest to parade them before our friends, who are too well aware of the value of our *Farmer*, from their own experience, to need commendation from others:

"I find myself again in agricultural life; and I have read and re-read the old numbers of your valuable *Maryland Farmer*, to which I was a subscriber a few years since, which I always read with much interest and profit—having again embarked in the business I must again enter your list of subscribers."

Ammonia is the most active and efficient form of nitrogen when applied as a fertilizer, and organic nitrogen in certain albuminoids is more effectual than the nitrates,



## THOMAS MEEHAN IN BALTIMORE.

The many friends of Horticulture in this city, and especially the members and friends of the MARYLAND HORTICULTURAL SOCIETY, were delighted at the recent visit of this distinguished gentleman to our city, to many of whom he had been known for years by fame, but not personally. The visit was occasioned by an invitation from officers of the Horticultural Society, as well as a long cherished desire on his own part to pay our monumental city a visit, to meet old friends, and make new acquaintances, and to learn what progress we had made in that which is nearest his heart, Horticulture, &c., and especially to attend the Horticultural Session, held July 14th, at the suburban residence of its president. During his sojourn among us he was the special guest of EZRA WHITMAN, Esq., the efficient and energetic President of the new and flourishing State organization for the promotion and elevation of Horticulture and its kindred sciences, who extended to him all the courtesies due one so eminent in his profession, and who is endeared to the thousands who delight in the nurture of flowers, fruits, plants and trees. At the meeting alluded to, he addressed the Society in his usual felicitous manner, and aroused by his appeals, a new enthusiasm in the breast of every one present, thereby inciting them to renewed efforts in the noble cause in which they are engaged.

Whilst with us it was the pleasure of one of the editors of the *Maryland Farmer* to accompany him on a running visit to the nurseries of a number of our prominent florists, among whom were John Feast, J. R. Halliday, Thomas Fairley and Robt. Halliday, expressing himself much pleased with all he saw and heard. We also made a trip through our Park—grand old Druid Hill—of which Baltimore is so proud. This being his first visit and inspection, he expressed surprise at the grand improvements made, complimenting the Direction on the taste and skill displayed in the fine landscaping and ornamentation, that elicited the admiration of the visitor on every hand. At a late hour we returned to the mansion of president Whitman, and after tea left him in charge of the hospitable family. The next day he was escorted by other friends on a visit to the fine estates of several of our citizens of wealth and taste.

Mr. Meehan is Secretary of the Pennsylvania Horticultural Society, an institution which has, under his special efforts, grown to great usefulness, and has long been the editor of that standard and popular Horticultural Journal, THE GARDENER'S MONTHLY, published in Philadelphia—and he is

noted throughout the country as the foremost man in the beautiful science to which he devotes so much of his time and talent. His popular and practical lectures, and the productions of his ready pen, have bound him as with hooks of steel, to lovers of the beautiful in nature and art wheresoever dispersed. Since the first organization of our Maryland Horticultural Society he has manifested a deep and lively interest in its prosperity and welfare, volunteering and cheerfully giving advice that might be calculated to promote the cause in which his whole soul is enlisted. May he be spared for many years, with health and spirits, to enable him to fulfill his mission in the labor of advancing and cultivating the growing taste of his countrymen, for the beautiful and useful, as well as gratifying the patriotic aspirations of his heart, is the prayer of a whole host of friends in old Maryland.

GREAT YIELD OF WHEAT.—We learn that the crop of wheat harvested from a field of forty acres, on the farm of Col. Charles E. Trail, near Monocacy Junction, Frederick county, Md., has recently been threshed and the yield was forty-four bushels per acre. It was the *Fultz* variety, a smooth headed red wheat from Pennsylvania.

DELAWARE STRAWBERRY CROP.—A Wilmington, Del., paper says that 667 car loads of strawberries have been shipped from the Peninsula this season. These contained 186,760 crates, or 7,470,400 boxes. This is nearly 2½ millions boxes more than the shipment of 1873. The crop the present season has been the heaviest yet produced on the Peninsula.

LIVE STOCK TRADE.—A careful estimate by a well-known stock dealer places the value of live stock transactions in Baltimore, at \$15,000,000 per annum. The yards have a capacity for the accommodation of 5,000 head of cattle, 14,000, hogs, and 20,000 sheep, and the shipments are at present quite active.

WE understand Mr. J. D. Oakford has disposed of his stock of fine poultry to Mr. C. D. Parker, of this city for about \$600, consisting of Dark and Light Brahma, Houdans, Brown Leghorns, Black Hamburgs, and Rouen Ducks.

CHOICE FOWLS FOR SALE.—We call attention to the advertisement of J. E. Lloyd, of Cold Spring Poultry and Stock Yards, Baltimore county, Md., who offers for sale Light and Dark Brahmas and Partridge Cochins, bred from Pedigree and premium stock. He is reliable.

## WHERE OUR TOBACCO GROWS.

A recent report of the Department of Agriculture gives some statistics concerning the culture of tobacco, that are really interesting. The total area of land in the United States devoted to tobacco is quite small—only equal to twenty townships of land, or about a single average county. Cheshire county, New-Hampshire, raises ninety-seven per cent. of all the tobacco raised in that State.—Franklin, Hampshire and Hampden counties, in Massachusetts, raise ninety-six per cent. of what is raised in Massachusetts. In Hartford county, Connecticut, are grown seven-tenths of all the tobacco credited to that State. Onondaga, Chemung and Steuben counties, in New-York, raise eight-tenths that is grown of this staple in the State.—Three counties in Pennsylvania—Lancaster, York and Bucks—produce nearly all the tobacco grown. Nine-tenths of this crop raised in Bucks county is grown in a single township (Falls), in close vicinity to the old William Penn mansion. Five counties in Maryland grow sixty per cent. of the tobacco in that State. Twenty-four counties in Virginia produce two-thirds; ten counties in North Carolina, three-fourths; Gadsden county, Florida, three-fourths; nine counties in Tennessee, two-thirds; five counties in West-Virginia, two-thirds; forty-three counties in Kentucky raise seven-tenths; ten counties in Ohio grow two-thirds; nine counties in Missouri produce three-fourths; four counties in Indiana and six in Illinois produce most of the tobacco in those States; and Rock and Dane counties in Wisconsin grow nearly all raised in that State.

It is evident that the area devoted to this crop is very small in comparison with other staples.—The reports, from which the above statements are made up, leave out all counties producing less than 100,000 pounds per annum. Eighty-five per cent. of the whole crop is grown in seven States, yielding in the order named: Kentucky, Virginia, Tennessee, Ohio, Maryland, Missouri and North-Carolina. Six other States—Illinois, Indiana, Connecticut, New-York, Pennsylvania and Massachusetts—are credited with over a million pounds each in the census of 1870. Kentucky and Virginia grow more than half the whole crop; Kentucky alone grows forty per cent. of the whole.

The total returns to the Department from 140 counties, show an increase in the crop of 1873 over that of 1870 of forty-one per cent., and if the same proportion of increase may be assumed for the whole crop of the United States, the tobacco crop of 1873 amounted in round numbers to 370,-

000,000 pounds, representing a cash value, at wholesale prices, of \$17,698,628.

According to statistics received during the month of June and the first week in July, the crop of 1874 will be somewhere from 25 to 40 per cent. less than that of 1873, owing almost entirely to meteorological circumstances. Drouth, and want of plants everywhere, are complained of by farmers.—*Courtesy Gentleman.*

## RAISING FINE LEAF IN VIRGINIA.

A successful raiser of Tobacco, Mr. Simpson of Rich Vally, Smythe county, Virginia, gives the following as his method in producing and managing fine tobacco:

"Any fresh land, with a good southern exposure, will grow fine tobacco. Prepare the land by breaking with a narrow coultter, pick and burn the roots. When practicable, check three feet apart, making a small hill on the check, avoid leaving chips, stones, clods or turf in or about the hill. Plant as early in May as possible. As soon as the plants have taking a start to grow, clean the land thoroughly of all vegetation, using the hand to clean around the plant; in working the crop the second time, it is necessary to enlarge the hill; the work with the hoe is now finished. When the tobacco is large enough to top, strip four or five of the bottom leaves off, take out the bud, leaving eight or ten leaves, according to the strength of the land. It now becomes necessary to give close attention to the crop, in order to keep it clear of worms and suckers; allow the plants to yellow on the hills as much as possible before you cut. When thoroughly ripe, cut and house at once, putting eight plants on a stick, and the sticks eight inches apart. When the house is full let it stand without fire until the tails of tobacco on the bottom tier begin to yellow, then heat the house with coal to 90°, keeping the door open, that the air may circulate in the house, to prevent the tobacco going into a sweat. When as yellow as you want it, increase your heat in two hours from 90 to 140 deg., and as soon as the tails of the tobacco are dry, close tight; continue this heat until the stems and stalks are cured, which will be usually in 48 hours. The manner of handling is the same as shipping tobacco, except in classifying. I usually make five qualities. I should have stated that the house should be kept perfectly tight, and in damp weather a small fire should be kept in the house to dry the air." Following this plan, Mr. S. planted five acres of tobacco, the product of which he shipped to Lynchburg and sold for \$675, clear of shipping and warehouse expenses, making an average of \$135 per acre.



## CROP RETURNS.

To the Monthly Report of the Department of Agriculture for July, 1874, we are indebted for the following digest of the wheat and corn crops:

## WHEAT.

The average condition of winter-wheat for the whole country is 104. The most favorable conditions of growth were found in several of the States in which other crops suffered most severely. Arkansas the maximum, 144; Tennessee, 119; West Virginia, 118; Kentucky, 117. In these States a severe and destructive drought, commencing shortly before wheat harvest gave to this grain a fine opportunity for ripening thoroughly, but told fearfully upon all spring and summer crops. In the Middle States the crop was generally above average, and in the States north of the Ohio nearly or quite average. Ohio, where drought has most prevailed, shows the highest average, 105.—West of the Mississippi the crop was generally very good, and above average, except where late sowings were caught by chinch-bugs, which, with other causes, reduced the average of Kansas to 90. This plague was also felt in a few localities in Virginia and North Carolina, but the crop in the southern wheat States generally showed a considerable margin above average, though Texas reached only 84. In New England the small acreage of winter-wheat was somewhat injured by winter-killing. The Futz wheat, from seed furnished by the Department, is favorably reported in Chester, Pennsylvania, but rusted badly and yielded lightly in Talbot and Calvert, Maryland. In Buckingham, Virginia, it excelled all other varieties; in Augusta it ripened several days before any other; in Madison it retained its prestige as also in Bath; but in Spottsylvania it yielded only a half crop, and rusted badly in Dinwiddie. In Stanley, North Carolina, binders complain of the weight of sheaves. In Fannin, Georgia, it was very fine. In Knox, Tennessee it was hardy, vigorous, and productive, excelling all other varieties. Tappahannock wheat is also reported as very successful in several portions of the county, its occasional failures being generally traceable to special abnormal conditions.

Spring-wheat shows a general average of 96. In New England it was on the whole considerably above average, though backward in several counties. In the few counties growing this crop in the Middle States it is below average. In Ohio, Nebraska, and on the Pacific coast the crop was above average. In the Northwestern States it especially suffered from the ravages of chinch-bugs and other insects. In several counties of Indiana this insect were demonstrating seriously; in Morgan several fields were destroyed and were plowed up to be put in other crops. Illinois reports numerous casualties of similar character, and in those districts of Wisconsin where droughts prevailed the same misfortune is noted. In several localities in Iowa timely rains destroyed the young insects and saved the crops from their ravages, but not till after considerable damage had been done.—The grasshoppers were also injurious here. In Missouri the chinch nuisance was quite serious. In Caldwell county the injury to the crop was estimated variously from 35 to 50 per cent. It is noticed in Benton that, while the crop was badly injured on prairie soils, on timber-land it reached a full average. Pettis reports the insects as reducing the crop from 25 to

30 per cent. In other counties, however, the pest is hardly noticeable and the crops are uncommonly promising. The chinch also infested the spring-wheat of Kansas; in Anderson they nearly ruined the crop; in Franklin and Wilson, farmers propose to sow no more wheat till secured against this risk. In some counties, as in Montgomery, early sowings were but lightly affected, especially of drilled wheat, but broad-cast crops were badly affected. In Nebraska, where the pest did not appear, the crop was above average. In one or two counties an aversion to improved machinery for harvesting is noted; farmers preferred hiring extra labor to purchasing reapers and mowers. In some localities of California the crop was affected by hot, dry weather and north winds.—In some counties of Oregon heavy rains produced a heavy growth, which it was feared might prove excessive. In Utah the crop was injured by cut-worms.

## CORN.

An increase in the corn area of fully 2,000,000 acres is apparent, or 6 per cent. above the breadth of last year. The percentage is largest in the South; the increase in acres is largest in the West. Returns make the grain in Iowa over 300,000 acres; in Missouri, about the same; in Illinois, about 200,000; in Indiana, fully 200,000; in Kansas, about 170,000. Georgia shows almost as large an increase as Iowa and Missouri; Alabama, 18,000 acres; Mississippi, 120,000 acres; Texas, 200,000 acres. The inducement to enlarge the corn area of the cotton States appear to have been less influential in the Mississippi Valley than in the more eastern States, Georgia particularly. The increase in Texas is simply due to the natural expansion of crop areas from immigration, and is equally noticeable in cotton and other crops.

The number of States reporting a decrease in area is small, including only Maine, New Hampshire, Vermont, Florida, Louisiana, Tennessee, West Virginia, Kentucky, and California. In Northern New England a late unfavorable spring interfered with planting, and in Louisiana the area is less by reason of the over-flow.

The States making increase are as follows: Maryland, Virginia, Wisconsin, 101; Pennsylvania, Ohio, Nebraska, 102; Massachusetts, Oregon, 103; Connecticut, North Carolina, Illinois, 104; South Carolina, Michigan, 106; Indiana, 108; Iowa, 109; Mississippi, Minnesota, 110; Alabama, Arkansas, 112; Kansas, 114; Georgia, 115.

The condition of corn is generally good in the West, but elsewhere variable. Only Massachusetts of the Eastern States reports average condition, only Pennsylvania of the Middle States, and Maryland, South Carolina, Georgia, Florida, and Texas of the Southern States. Minnesota is an exception in the Western States, reporting 94; and California and Oregon fail to give a full average.

The percentages of condition above average are as follows: South Carolina, 101; Massachusetts, Florida, Michigan, Kansas, 102; Maryland, Iowa, 104; Illinois, 105; Texas, 106; Indiana, Nebraska, 108. The States averaging 100 are Pennsylvania, Georgia, Wisconsin, Missouri.

On the northern Atlantic coast the late planting and cold storms are the causes of somewhat inferior condition, though the color is generally good and present growth promising. The inundations, soaking rains, and consequent replantings in the Southern States make the appearance of corn quite variable, and account for condition below average in certain States, while in others such disadvantages, existing to a less degree, have been overcome by good culture and good weather. There is complaint of local drought, but it is not of long continuance or involving wide areas. It has been most serious in Arkansas, some counties having had little or no rain in two months. In the Ohio Valley there is some complaint of drought; in West Virginia, Ohio, Kentucky, and in some parts of Illinois, and to some extent in States west of Mississippi. So far the injury from this cause throughout the country is less than usual, but should the droughts of early July be continued and intensified through the month, great injury may result.—Cut-worms have been generally injurious, and chinch bugs in the west, after devastating wheat-fields, have attacked corn vigorously in many localities.



## MARYLAND HORTICULTURAL SOCIETY.

## JULY MEETING.

The monthly meeting of this Society was held on the afternoon of July 14th, at the suburban residence of Ezra Whitman, Esq., President, in accordance with invitation.

Among the number present were Thomas Meehan, Esq., Secretary of the Pennsylvania Horticultural Society, and editor of the *Gardener's Monthly*; Prof. N. B. Worthington, of the Maryland State Agricultural College, Isaac S. George, President of the Maryland Institute, Gen. James M. Anderson, City Collector, Senator J. Carroll Walsh, of Harford county, Judge George Wilson, editor *Marlboro Gazette*, Wm. H. Vanderford, *Westminster Advocate*, Wm. B. Sands, editor *American Farmer*, Gen. F. C. Latrobe, Samuel Townsend, William Ward, Lawrence Sangston, John S. Reese, George W. Herring, Woodward Abrahams, G. W. Gail, R. J. Ruth, R. Q. Taylor, with many others not members, with fair attendance of the membership.

The Society was called to order by the President, T. C. Dorsey, Secretary, R. W. L. Rasin, Treasurer. The minutes of last meeting was read and approved. The Secretary also read letters from a number of prominent citizens of the State, among whom were Gov. Whyte, Gov. Groome, A. Bowie Davis, G. H. Hunt, A. J. Halliday, &c., regretting their inability to be present.

President Whitman stated that there was very little business of importance to be transacted, but deemed it important for the welfare of the Society that its members should become personally acquainted with each other, and with that view the present meeting would be somewhat social in its character, and that owing to the dearth of fruits and flowers at this season, it was deemed advisable not to attempt a monthly display. He then proposed that the time should be occupied in hearing from the members and other gentlemen present.

Col. W. W. W. Bowie said that though taking much interest in the Society, his health had prevented his attendance at its meetings as often as he had desired, since the honor had been done him of placing him on the committee to frame by-laws. Physical inability had prevented his engaging as largely in the work of the Association as he desired to do, but he rose to make an appeal to all to co-operate by handing in their names as subscribers. No pursuit was more attractive than that of horticulture. The first thing that a child grasped with delight was usually a flower, and among its first joys was the eating of luscious fruit. Fruit and flowers are the delight alike of infancy and old age—of men, women and children. Mr. Bowie paid an eloquent tribute to Maryland as a fruit and flower-growing State, and eulogized the intelligence, warm-heartedness, enterprise and many virtues of the members and friends of the Horticultural Society. It might in time rival the older societies of other States. The Boston Society, after paying \$900 to edit its papers and publish its journal, had offered premiums amounting to \$5,500 for fruits, flowers and vegetables. If the members of the Maryland Society go on as they have begun, and are sustained as they should be by others, they may accomplish great things.

Mr. Whitman then introduced to the meeting the distinguished horticulturist, Thomas Meehan, Esq., of Philadelphia, who is well known throughout the entire country, from his interesting lectures and practical pen.

Mr. Meehan discussed in a pleasant, social way, the moral influence of horticultural pursuits. As God, the Creator, was the great source of love, the study of His works had a tendency to fill the heart with reverence and kindly sentiments. This accounted for the kindness so strikingly manifested at the meetings of horticulturists. Agriculture cared more for practical, material results—how to make the most out of the land—while horticulture began with the idea of beautifying the land. It was his pleasure to have made, twenty years ago, the acquaintance of one of the Vice-Presidents of the Pennsylvania Horticultural Society, who spent four or five thousand dollars a year in the cultivation of fruits and flowers. Some might say it was money wasted, but nearly the whole of it went to increase the happiness of the sick and poor. Scarcely any of it went for his individual use. Mr. Meehan went on to detail the great advances made in fruit growing by the efforts of the Cincinnati and Massachusetts Horticultural Societies. They had so stimulated the growth of strawberries, blackberries and raspberries as to bring them within the reach of even the poorest citizens. Illustrating the influence of sentiment, he told of a lady with two children who rode on the cars with him from Philadelphia. When she passed through Wilmington she was decided in her opinion of the barbarity of Delaware that whipped persons convicted of crime. Mr. Meehan told her of the kidnapped children, and all her maternal feelings were interested. He told her that if the kidnappers were caught they would be sent to Delaware to be whipped. "Ah!" said she, "that is just right."

Mr. Meehan showed the moral effect of horticultural studies—the observation of the design manifest in nature, and the benefit of such pursuits.—The dandelion raising and lowering its stem to favor the development of its flower and the scattering of seed, excited our wonder. The hybrid lichen produced by a union of water and the fungi on damp places, which if not cared for would do much harm to fruit trees. The curious intelligence of insectivorous plants like the fly-plant of South Carolina, the pitcher plant, and a plant found in the swamps of New Jersey. He referred to the toad-stool eating up the small roots of peach trees, and thus starving the trees, whose injury is marked by what is called the yellows, and showed the advantage of knowing how to remedy the evil. Mr. Meehan continued his remarks to some length, and was listened to attentively and appreciatively.

Mr. John Feast was here introduced and asked leave to read a paper: It showed that the art of horticulture advanced as it depended on the natural sciences. For the facts and theories of vegetable physiology it is indebted to botany; for assistance in regard to the nature of soils and manures, to chemistry, and for a knowledge of many circumstances affecting garden labor, to meteorology. In recent times it had progressed very rapidly since it had been placed on a scientific basis. A close adherence to the laws of vegetable physiology had taken the place of the prejudices of former times. After discussing fruit, flower and vegetable

culture in store, greenhouse, conservatory and cold frame departments, he said: "In all ages flowers have been universally cherished. The ancients paid particular attention to them, and they were in great request at the entertainments of the wealthy. They were scattered before the triumphal care of conquerors, and formed the distinguishing symbols of many of the deities. Flowers embellish our gardens; they give a more brilliant lustre to our festivals; they are the interpreters of our affections; they are the testimonial of our gratitude; they are often necessary to the pomp of our religious ceremonies and they seem to associate and mingle other perfumes with the purity of our prayers, and the homage which we address to the Almighty. Happy are those who love and cultivate them! We told that Descartes prosecuted with ardor astronomy and the culture of flowers. Conde devoted his leisure hours to that delightful pursuit, and the vases of flowers were daily renewed upon the table of Lord Bacon while composing the volumes of his sublime philosophy. In Europe horticulture at this time has arrived at great perfection, owing to facilities in obtaining new plants, fruits, &c., from foreign countries by the aid of government or private individuals sending botanical collections all over the globe, to procure such things as are worthy of introduction, and at this time but few remain but have been introduced. There may be seen in many private as well as public collections, plants attaining the height of forty or fifty feet as palms. Bananas and other tropical fruits are worthy of admiration, and have buildings erected for their protection suitable to their growth, and of the finest structure and design. We may expect such here in the course of time as the love of flowers increases and taste develops itself, which depends greatly upon the horticulturist proving himself worthy of his calling by his assiduous labor and his interest in his profession.

Half a century ago horticulture in Baltimore was in its infancy. There were but two or three cultivators of flowers at that time. I was, said Mr. Feast, the first to take plants to market in 1825.—Plants commanded fair prices, and as population increased there was more demand. New plants were introduced which enriched the collection, and the love of flowers increased until it led to the organization of the first Maryland Horticultural Society. It held an exhibition in June, 1833, that was quite respectable. It was held in the Law Buildings. The society continued till 1835, and, like many others, had, for want of patronage, to abandon its efforts till 1851, when it was reorganized again. At this time there were many more cultivators around the city, and with collections of plants much increased by importing largely, the society gave exhibitions every year for six years, and was then, for want of proper interest, again abandoned in the same way. Now, alive to the interest of horticulture, we have a third time organized on a proper basis, and revived it with vigor. All are proud of the prospect ahead, feeling assured that the public will sustain the Society, and that cultivators, both public and private, are willing to contribute their share to the forthcoming exhibition to be held in September. The judges are gentlemen selected for their undoubted veracity, and the Executive Committee will have due regard to seeing justice done. In conclusion he appealed to the

friends of fruit, flowers and vegetables to do their duty in sustaining the Society and aiding the exhibition.

Mr. Whitman asked leave to read an item of interest which he found in a circular upon his table: It was that the hay crop of Maine 1,600,000 tons, was worth in Boston \$30 per ton, or \$48,000,000, and the cotton crop of Georgia was 600,000 bales, 400 pounds each, worth in Boston twenty cents a pound each, or altogether \$48,000,000. Now, he said, while these two States seemed peculiarly adapted to the production of these two great staples, which were of such enormous money value, why could not Maryland, whose soil, climate and geographical position, is so admirably adapted to the cultivation of fruits, flowers and vegetables estimate their value at the millions also, and to accomplish this end is one of the leading purposes of the Maryland Horticultural Society.

The reading of this item and remarks of the president elicited a short discussion which was participated in by Lawrence Sangston, Col. Bowie and others.

John S. Reese, volunteered to predict that Maryland would yet, in the abundance of fruits, flowers and vegetables, be a modern garden of Eden, but with no flaming sword of seraphim to hinder ingress or egress.

The following gentlemen then came forward and signed the constitution and received their certificate of membership: Dr. M. Hammond and Messrs. Laurence Sangston, R. Q. Taylor, George W. Wilson, John S. Reese, Isaac S. George, Geo. W. Gail, W. H. Vanderford, Gustav Burger, R. J. Ruth, Benjamin F. Grove, Harry E. Balzell, Gen. F. C. Latrobe, Gen. James M. Anderson and Dr. C. C. Bombaugh.

The company then on invitation partook of a handsome collation, and after divers complimentary speeches, adjourned to meet at Lehman's Hall in August.

### Coffee as a Disinfectant.

Roasted coffee, says the *Homoeopathic World*, is one of the most powerful means, not only of rendering animal and vegetable effluvia innocuous, but of actually destroying them. In proof of this, the statement is made that a room, in which meat in an advanced degree of decomposition had been kept for some time, was instantly deprived of all smell on an open coffee roaster being carried through it, containing one pound of newly roasted coffee; and in another room, the effluvia occasioned by the cleaning out of a cesspool, so that sulphureted hydrogen and ammonia could be clearly detected, was entirely removed on the employment of three ounces of freshly burnt coffee. Refrigerators get musty from flesh, fowl, or fish, kept too long in them. No remedy for purifying such receptacles, so simple as burnt coffee, can be employed.

If a lady in red was to cross a field in which was a goat what transformation would take place? The goat would turn to butter and the lady into a scarlet runner. And what's more, when she once got out of the field, there'd be no red-dress left her. Do you see?



# THE DAIRY.

## LONG TABLE TALK ON DAIRY MATTERS.

TALK NO. VII.

### ON SOILING.

As the season is now at hand for the preparatory work of soiling, we must offer a few suggestions on the question.

Soiling is the system of taking feed to cattle throughout the year, instead of taking cattle to the feed.

To do this it is necessary to begin the autumn previous to the spring and summer of such feeding: to feed properly, a succession of nutritious food must be secured. For large farms far from market with abundant pasture, we do not think the system advisable.

For farms near a market and for small farms anywhere, it has many advantages.

1. The cattle are kept in the stalls, or yard or small lot always within reach: there is no jumping into neighbor's grain fields, nor your own, nor dogging nor tin-panning, nor chasing by boys on horses, or bringing home; your horses are always in the stable ready for use, without hunting.

2. No fences are required to divide the farm into fields: the original outlay and cost of repairs for the fences of our country is a question of hundreds of millions of dollars: much of this could be saved.

3. Being supplied by a convenient well or running water, the cattle would not suffer from dry water beds, muddy or stagnant water, nor be driven long distances to water in a busy season.

4. In our section the pastures usually fail in July and August, and from that out pick up a living on provender, meadow and grain stubble, dry and unsuitable vegetable matter, and coarse grasses, which does not give the results in production we should aim at: by soiling, a sufficient quantity of good feed is always at hand for them. Plenty and excellence are two very enticing peculiarities in any system.

5. It will take less land than pasturing. If you have ten cows you must have 20 or 30 acres to pasture them on: an acre will summer a cow or horse when soiling, but the acre must be good.

6. There is nothing wasted in soiling: if the rye or wheat or oats gets too tough for the cattle, it can be plowed under for corn fodder, cut as hay for winter feed or harvested as ripe grain and straw.

7. As less land is required, the remainder of the land may be put into grain for the benefit of the cattle, or cut for hay.

8. A large quantity of manure is not only made but saved. The one great disadvantage of the system is the labor necessary to prosecute the system successfully: the stables or yard must be kept clean and strewn with plaster, clear fresh water always at hand, good bedding and regular feed furnished, the cattle kept from chasing and poking each other about in a limited area, and ample provision must be made in a succession of crops to keep them well supplied with palatable food.

Whether the offset to this outlay of time is sufficient, is a question for each individual to determine for himself: we simply state the case and give the process: we practice the system ourselves, so far as the confinement of the cattle is concerned, our experience leads us to believe they will do as well under proper treatment as when at large: they must have sufficient exercise in good weather: in bad weather they will do better kept in the stalls and fed and watered there: the stalls should be constructed with a trough running along them from which the cattle can obtain water without removal in bad weather.

Now for the process, and we give substantially our own mode: the amount of land necessary for an animal will depend on the condition of the land: no positive instructions can be given to be followed in all cases. Experience, tact, reading, observation, these will supply any deficiency which may be exhibited in the beginning of your operations.

1. It is the safe side to have land enough set apart: say 12 acres for 10 cows, and 2 horses: put your barn yard manure on this and divide as follows:

Early in September—after good preparation of the land—subsoiling, if the subsoil is clay or hard, drill in, fertilizing in the drill with 200 or 300 lbs. good fertilizer per acre, 3 acres of rye, 2 bushels seed per acre.

2. Same time, drill in 3 acres wheat, same manner, 2 bushels per acre.

3. Plow up in the Fall ready for early Spring seeding the remaining six acres: drill in 3 acres with oats, 3 bushels per acre, (with fertilizer in drill same as for rye,) as soon as it will do to work the land in the Spring.

4. Drill on the other 3 acres fodder corn 2 bushels per acre, in rows four feet apart, as soon as the ground gets warm in the Spring: if planted too early, cut worms and cold weather will be likely to injure it seriously. In addition to these 12 acres, two or three acres of ground should be prepared and sown in the Fall in September early, with clover seed 6 quarts per acre, and orchard grass 1 bushel per acre: this will do to fall back on in case of loss or deficiency in the other crops.



The rye will do to cut about the 1st, and will last till 15 or 20th of May: then cut the remaining portion for hay, and plow up and put in fodder corn: the wheat will do to cut after the rye; this and the orchard grass and clover will last till oats are ready, and fodder corn will soon follow these: rye and wheat also may be cut two or three times if desirable, and then planted in fodder corn: in July, after last working of corn, sow turnips broadcast—the strap-leaved variety—these will do for late Fall and Winter feeding.

A part of the oat land after the oats have been cut, should be plowed up and planted in mangold wurtzel or ruta бага turnips, or more fodder corn may be planted for late feeding, or may be cut when in full tassel and cured for winter feeding.

One feature of our practice is to drill the corn for our regular crop, in some places thick enough to thin out the surplus for feeding, and leave the best stalks that have ears on for grain.

The system of soiling is susceptible of great variety in the mode of proceeding: Chas. E. Coffin, of Murkirk, puts rye in in the Fall as usual, and in the Spring beginning very early, sows 3 acres oats every ten days for three or four plantings: then plants corn: he feeds orchard grass, clover or lucern, (which he has cut seven times,) after rye then oats, then corn, till frost: then mangold wurtzels, and ruta bagas for winter feeding. Col. Waring recommends more oats than we have suggested above, but their slow growth induces us to give them no more than 3 acres.

W. Crozier of New York, shows his appreciation of orchard grass for soiling, by putting in 17 acres of it.

White vetches, cabbages, white mustard, millet, hungarian grass, are also used in the rotation for soiling.

The accounts we have of the productiveness of small quantities of ground enriched and used for soiling purposes are very remarkable: we give one or two cases.

Lewis H. Cole of Carroll county, uses rye, wheat, oats, corn, and some clover and hungarian grass: from six acres he fed thirty cows and six horses partially, and cured rye, oats and wheat enough to last till the holidays. From another account in the *Practical Farmer*, we learn that  $2\frac{1}{2}$  acres put in first rate order and used for soiling, produced corn fodder, green rye, and white mustard enough to last twenty-five cows for two months, and thirty-five cows and a yoke of oxen one month, besides yielding eighteen hundred bushels of turnips.

Twenty-five cows were kept on another farm of eighty acres, on twelve acres of sowed corn, with

green oats as a change: twenty-seven cows were afterwards kept on the same farm. G. H. Wood is convinced that by a judicious system of soiling and steaming he can keep a cow a year on an acre and a-half of land.

E. W. Stewart, a high authority, has practiced soiling for many years, and has found that half an acre will support a cow through the soiling season.

From the first of June to October 15th, a cow was fed from the clover cut from one-fourth of an acre, making eight pounds of butter every week: four acres to a cow is the estimate for the yearly keeping of a cow: this gentleman found five-eighths of an acre sufficient on his system, and believes clover to be the best soiling crop of his thirty years experience, no other crop giving so many pounds of equal value for milk and butter.

### Feeding Cows—Cut Hay, &c.

July 11th, 1874.

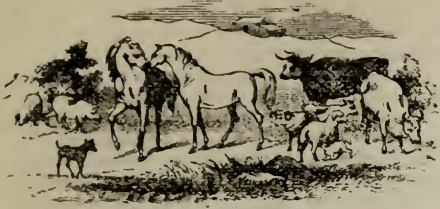
*Dairy Editor of the Maryland Farmer:*

I notice in *Maryland Farmer* for May, you say: "before turning out the cows every morning and every evening, give each cow a bushel of cut hay moistened and mixed with four quarts middling," &c.: is not this too much?

DAIRYMAN.

Too much hay, yes: we noticed the error at the time, but not too much bran: a peck of hay morning and night for each cow is sufficient: whether it will pay to feed grain on a full pasture is for each individual to determine by experiment for himself: it costs too much money to feed unnecessarily, and if the condition of the animal and the yield of milk and butter can be maintained without it for a few weeks on a flush pasture, it might be omitted, but should be resumed the moment the pastures fail or get woody, or the cows indicate by diminution of milk and butter that they require it: remember in this matter of feeding grain to cows that we are not feeding only for this weeks returns in money, but for next winters and next springs calf, and the general health and condition of the animal, and also for next summer's milk pail and cream pot: if you want ten pounds of butter per cow next summer, you must begin *now* to work for it: it is hard to make the investment and wait, but a good cow is like a good bottom meadow, or what Neal Dow said about giving to the poor with good security behind it, "down with the dust, it'll come back coined:" and we know the product of the ten-pounders is *gilt-edged*.

POUNDS OF MILK FOR ONE OF BUTTER.—The South Canton Butter Factory, St. Lawrence Co., N. Y., reports a pound of butter from 22.07 pounds of milk, for the season of 1873. This is the best report we have seen.

*Live Stock Register.***Sheep with Market-Gardening and Fruit-Culture.**

Our market gardeners who live at such a distance from cities as to render it too expensive to haul manures by teams, should introduce a system of stock keeping to supply these fertilizers at home. This can be done to a much larger extent than is generally supposed. We have sometimes recommended the dairy system as affording a means of making manure of the best quality for many garden crops—the milk affording a profit on expenditure and leaving the fertilizers free. But gardeners complain that their work is so exacting, at certain seasons, that they cannot spare the labor to properly attend to a dairy. To such, sheep will offer a means of obtaining manure with less labor, and of a quality highly satisfactory for almost every garden crop.

**MUTTON SHEEP.**

The gardener would of course, find it to his profit to keep a mutton breed. Living near cities, lambs would be quick sale at remunerative prices. In selecting the beginning of a flock, he would find it economical to buy two-year-old ewes of the mixed blood, and as even in quality as possible, that his lambs might be of even quality. Then use a full-blood Cotswold or Leicester ram. Never use a cross-bred male.

As the gardener keeps his sheep with a view to increase his manure, he will feed high for this purpose; but the desire for profit should also lead him to feed generously. Early lambs will be his greatest source of profit, and his success with these will depend upon his system of feeding. Unlike the ordinary farmer, he will not be looking so much to this source for profit from his land, and will the more cheerfully supply any deficiency in grain, only asking that it shall be repaid to him in mutton and wool. The more grain he feeds the richer will be his manure. His refuse cabbage, turnips, beets, carrots—every thing in the way of green food will come into use in feeding sheep. He will require to practice

**PARTIAL SOILING**

to insure the greater success, unless he has considerable land not used in gardening, or has extensive orcharding in which the sheep may pasture. But the soiling system will best conduce to the object he has in view, the enrichment of his soil. This system will enable him to keep a larger proportional number of sheep. If he works but twenty-five acres he may keep 100 or more ewes, and raise as many lambs for market, besides keeping his number good. That is, he may raise the summer and winter fodder necessary, with a liberal allowance of grain, to keep that number in the highest condition. He will have to supply a sufficient amount of hurdle or movable fence, by which he may confine his sheep in small flocks upon such pieces of land as he desires to manure. While the sheep are confined to a small enclosure, say, of one square rod to each sheep, they may be fed upon the refuse of garden crops, for instance, peas after the last picking for market will furnish excellent green food. A large amount of this and other green food is furnished by a garden. Then resting the land from exhausting garden crops will enable clover to be sown and cut for one or two years, which will furnish excellent soiling food.

A crop of oats, peas, sowed corn or Hungarian grass may be grown after a garden crop for fodder.

The orchard will also furnish a large amount of food, and with this movable fence the sheep may be confined to just such part as will be most beneficial to the fruit. Sheep are found to be a very effectual remedy for nearly all the insect enemies in orchards. All the defective fruit will be turned into mutton and wool instead of furnishing a burrow for the incubation of insects which will destroy what grows afterward.

Lawes and Gilbert's experiments upon different animals to show the per cent. of food utilized, proved sheep to store up twelve per cent., while cattle only stored up eight per cent. From this it will seem that a pound of mutton can be made with less food than a pound of beef. We think the gardener and fruit raiser can well afford to grow mutton and wool both for profit and the enrichment of his soil.—*Live Stock Journal.*

**BUTTERMILK AND SCURVY.**

A Colorado *Agriculturist* correspondent informs that journal that he finds buttermilk to be an almost unfailing cure for scurvy in hogs. To prove the fact, among other cases which have come under his notice, he says he owns several pigs which, a few weeks since, were suffering terribly from the effects of the disease, and that a speedy cure was effected by merely pouring the buttermilk over them a few times in the pen. This remedy has been in use for years, and is very efficient.



## Herefords---Holsteins---Short-horns.

A correspondent of the Country Gentleman, in Champaign county, Illinois, after alluding to the great sale of Mr. Preece, to come off in England, says:

"So far as they have been imported into, reared and bred in Illinois, they are offering strong competition to the Short-horns. The best bull of the University herds is a Canada Hereford, and the institution has a Louan bull from Mr. Pickrell, an Ayrshire from Mr. King's, and an Alderney from Colt's herd. In all things but the coarse head and heavy horns of his race, the Hereford is the handsomest animal, eats on less food, weighs more, and is by far the better proportioned. I want to have the opportunity some day to compare the respective merits of the beef of a well fattened grade Hereford and a grade Short-horn.

The Holsteins brought into this county by Col. Bradley, a year since, are fast making friends. All of the grade calves—the males—show size, bone and quality, which will make them 1300 to 1500 pounds steers at 2½ years, while the females, in almost every instance, show the marks of making superior milkers.

It does look to me as if some of the beginners were going a little wild on the subject of Short-horns, and for that reason I think an endeavor should be made to direct attention to other breeds, which may offer at moderate prices, opportunities to invest in full blooded races, which may turn out as profitable as the high-priced and fashionable Short-horn.

THE LAMB SHALL LIE DOWN WITH THE WOLF.—A Massachusetts farmer says: "My cattle will follow me until I leave the lot, and on the way up to the barn yard in the evening, stop and call for a lock of hay." Smithson says there is nothing at all remarkable about that. He went into a barn-yard in the country one day last week, where he had not the slightest acquaintance with the cattle; an old bull not only followed him until he left the lot, but took the gate off the hinges, and raced with him to the house in the most familiar way possible. Smithson says he has no doubt that the old fellow would have called for something if he had waited a little while, but he didn't want to keep the folks waiting dinner; so he hung one tail of his coat and a piece of his pants on the bull's horns, and went into the house.

We have known bees to follow people of our own name, without calling "for a lock of hay." Agassiz says bees are lively and smart. We believe it.

## USEFUL RECIPES.

KIDNEY WORMS IN SWINE.—A writer in the Prairie Farmer says:—Kidney worm is not a common disease in hogs. Occasionally one or two in a number of hogs suffer from the presence of one or more worms in the kidneys; but the ailment is not often fatal, and becomes so only after a long time of suffering and consequent disease or degeneration of one or both kidneys. In a strong pig two drams of turpentine may be given in four ounces of linseed oil and a little gruel. Great care should be exercised in not killing the pig by drenching it improperly. Besides this the pigs should have sour food, or a little brine of herrings mixed in the food. When in season, sourknot, radishes, unripe fruit, cucumbers, celery tops, and especially acorns. Wood ashes should occasionally be mixed in the food. Hogs should have access to clean and fresh drinking water.

CHOKED CATTLE.—J. B. Jones, in the *Country Gentleman* says:—Having so often seen the following cure for choked cattle tried, and it never failed, we would like to see it reprinted quarterly: Moisten fine cut chewing tobacco with some sticky fluid like molasses or mucilage, making a ball as large as a hen's egg; open the animal's mouth, carefully pulling out the tongue, and insert the ball as far back as possible; as the tongue goes back, it will be swallowed, making the animal *deathly sick*, relaxing the muscles, and, by vomiting, causing it to throw up the obstruction. This never fails if tried while strength is left to walk.

RELIEF FOR CATTLE THAT HAVE EATEN TOO MUCH GRAIN.—J. W. Griswold in the *Farmer's Union*, says:—The most simple remedy is to make a tea of wood soot, say one-half pint of soot to one quart of water. Steep a short time to get the strength, and pour down the throat through a horn, or a thick glass bottle. This will counteract the acid of the stomach occasioned by over eating. Oil or melted lard I have used with good success, giving almost instant relief. This last also is most excellent for cattle when choked.

HAY TEA FOR CALVES.—A farmer who had a calf of value and no milk to give it was advised to give it hay tea. He did so and the calf is reported as doing finely though it has neither received hay nor meal since he got. He cuts the best and finest hay he has, about two inches long and pours boiling water over it; lets it stand until cooled to about the heat of milk from the cow, when the tea is given to the calf and the hay to the cow. Both calf and cow thrive on this feed. We have fed a great deal of hay tea to calves, with good results.

STEPPED THROUGH A BRIDGE.—"I have a mare that stepped through a bridge and tore the skin on the forearm above the knee, making a ragged wound. She is not very lame, but I fear a bad sore. What is the best to do in such a case?"

Keep the wound clean by washing, and apply the turpentine liniment as follows: One part spirits turpentine and three of olive oil.

REMEDY FOR SCOURS IN PIGS AND CALVES.—A perfectly reliable remedy is said to be mixing yellow clay in the water trough or vessels from which the animals drink.



## LADIES DEPARTMENT.

## A CHAT WITH THE LADIES FOR AUGUST.

BY PATUXENT PLANTER.

"The earth is still, so still—  
We almost hear its throbbing pulse beat,  
Alone with nature in this quiet hour;  
How sweet it is to let the immortal mind  
Sour far above the meaner things of earth."

Such were the words of the poet that memory recalled as I reclined on a couch under the shade of a fine tree early one morning in Patterson Park, but how soon did my eyes bring me down from the poet's soarings! The broad water bearing on its bosom the winged and steam propelled messengers and bearers of trade lay before me and the great city lying behind, with all its thoroughfares teeming with active business life, and its crowded dwellings, splendid private and public buildings, and beautiful monuments, which gives to it its proud distinction among rival sister cities. Here was a field for human thoughts on the grandeur of this mundane sphere; the splendors of nature; the colossal efforts and magnificent works of man. But a little party of lightly respectable young people passed me at the moment, and still further brought down "the immortal mind," to the "meaner things of earth." The ladies were pretty, yet disfigured by scandalous fashion—they wore the last style of *Polonaise*—fitting the figure in front as tight as a new glove, (reminding me of the time men wore pants so tight that they had to be shaken in them,) and full behind with a protruding hump different in color from the skirt, but in its width and form, resembling the huge seat, old stage coaches used to have appended behind, to carry the baggage, before Saratoga Trunks were invented.

"O, fairest of creation, last and best  
Of all God's works,"

why will ye crucify nature and shock common sense—  
—might not the word be, *decency*?

Invalidism and August weather combined are provocative of moralizing, especially on the part of such as have entered the last summer month of the year life, when spring time has gone, and the harvest passed, and autumn is at hand; hence, the young folks dresses, set me thinking of the passing times.

Oh! ye christian mothers, had ye not better turn your thoughts to your daughter's manners and dresses, and trouble yourselves less about breaking up the sale of that which we are told in Scripture is "good for the stomach's sake," and "maketh the heart of man glad"? Is there no other terrible sin on earth than intemperance in drinking?

Think ye not, if our daughters were less given to reading sensational French stories, trained to be more dignified in manners and refined in conversation, to be, in a word, more blissful in ignorance, of the weaknesses and wickedness of the world, than they are at the present day—and dressed more modestly and becomingly, as daughters and wives of a people who retain their liberty only as long as they maintain virtue and truth—think ye not that the fashions at the lascivious courts of Louis 14th, of France, and of England's Merry Monarch, had not much to do with the infancy of those times? May not the licence of the times and the modes of dressing pursued by our matrons and maidens, be in some way responsible

for the occurrences of such scandals as the *Tilton-Beccher*, and like disgusting details of crime in high life, as daily are read in the newspapers? Rest assured wild extravagance in dress is folly, and folly leads to vice. The daughter is in greater danger from pampering her love of fashionable dress, than the son is from the wine-cup or beer-mug. Look at home then, pray at home with your daughters and sons, and not on the streets at the groggeries. None of my readers I know would do *this*, but perhaps some of them lecture young men about temperance, in the presence of their daughters, whose dresses would make a modest young man's face as crimson, as if he had indulged in the *ardent*.

## STATE HORTICULTURAL EXHIBITION.

I desire to call your attention to the two great exhibitions to take place at Baltimore, in September and October. The State Horticultural Annual Exhibition in September, and the State Agricultural Society in October. At each one you have a chance to show your skill in house-wifery in the various departments assigned chiefly to woman's work. The attractions offered by the Horticultural Society will be peculiarly interesting to ladies, and they will be well repaid by a visit to Baltimore to witness the gorgeous display of flowers, fruits, &c., there presented, besides the great pleasure of receiving a premium, should they bring along with them some floral or vegetable production that is a shade better than any other offered of its class. Do not say "I have a remarkable Fuchsia, or other ordinary flower, or I have a very superior vegetable, yet sham!—they would laugh at me." No such cowardice, my good lady; bring it, and ten to one, you beat the self-important professional florist or gardener, who thinks nobody can beat him. Remember little David slew Goliath.

## STATE AGRICULTURAL FAIR.

You have plenty time to prepare for the Agricultural Society in October. Read carefully over the list of Premiums and determine which you will go for. A premium for best ham, wine, butter, &c., will be a proud achievement, and the same for all articles in the class of domestic and household manufacture.—Such premiums are far better and far more useful, (because the honor is enjoyed while you live,) than the two commonly lying inscriptions of the marble tomb. The sensible, thoughtful youth in search of a wife, a true help-mate!—will scan the list of premiums, and enquire who is Miss— that took the premium for quilts, hose, or bread, butter, wine, preserves, pickles, &c., and the same will be read by the husband, who endures bad housekeeping, to his wife, with great gusto, remarking, "I see our neighbor Mrs. — took several premiums, *my dear*; she is a nice house-keeper, her bread is very fine, could you not get her recipe, or get her to show you how she makes such delicious bread and butter," at same time breaking or cutting a lump of dough, white at bottom, burnt on top, and heavy as lead, neither biscuit nor roll, with greasy spots in centre, like the core of a hard apple, and smearing over it, a sort of cottage cheese after it has been exposed to the sun an hour, called "*fresh butter*." Ye Gods! protect us, but I have seen such things, and they are, I fear, more the rule than the exception in Maryland. Ladies, let me beg you from the country, come to these Exhibitions, and I feel sure you will learn much, even you who are my model house-keepers. We all have to read, or in some way, gain information or we cannot keep up with the progress of the age.

## FRUIT DRYING.

Drying apples is a work to be begun this month, especially if a portion is intended for sale. To much facilitate the greater labor in this operation, let me urge you to get a "*Redding Improved Apple Parer*," it is a new and much approved Parer. If you have peaches this year, dry some carefully, they make a fine substitute for raisins, I think are far better for puddings, dumplings, turn-overs, &c. There is also the Ryder's American Fruit Drier, a machine well adapted to the purpose, and costing from \$50 to \$200.

## STATE FAIRS, 1874

American Institute New York.....	Sept. 9, Nov. 14
California, Sacramento.....	Sept. 21, 26
Cincinnati Industrial.....	Sept. 2, Oct. 3
Colorado, Denver.....	Sept. 22, 26
Georgia, Atlanta.....	Oct. — —
Illinois, Peoria.....	Sept. 14, 18
Indiana, Indianapolis.....	Sept. 7, Oct. 7
Iowa, Keokuk.....	Sept. 21, 25
Kansas, Leavenworth.....	Sept. 7, 11
Maine, Lewiston.....	Sept. 22, 25
Maine Pomological, Portland.....	Sept. 22, 25
Maryland, Baltimore.....	Oct. 6, 10
Michigan, East Saginaw.....	Sept. 14, 19
Minnesota, St. Paul.....	Sept. 8, 12
Mississippi, Jackson.....	Oct. 26, —
Montana, Helena.....	Sept. 14, 21
Nebraska, Omaha.....	Sept. 29, Oct. 2
New-England, Providence, R. I.....	Sept. 1, 4
New-Hampshire, Manchester.....	Sept. 29, Oct. 2
New-Jersey, Waverly.....	Sept. 14, 19
New York, Rochester.....	Sept. 14, 18
Nova Scotia, Halifax.....	Oct. 5, 10
Ohio, Columbus.....	Sept. 7, 11
Pennsylvania, Easton.....	Sept. 29, Oct. 2
Rhode Island, Providence.....	Sept. 1, 4
St. Louis Association, St. Louis, Mo.....	Oct. 5, 10
Virginia, Richmond.....	Oct. 27, 30
West Virginia, Clarksburg.....	Sept. 22, 24
Wisconsin, Milwaukee.....	Sept. 7, 11

## POULTRY SHOWS.

Bucks County, Pa, Doylestown.....	Dec. 8, 11
Central New York, Utica.....	Jan. 6, 13
Connecticut, Hartford.....	Dec. 15, 18
Eastern Pennsylvania, Doylestown.....	Dec. 8, 11
Illinois, Peoria.....	Sept. 14, 19
Iowa, Dubuque.....	Dec. 15, 18
Lehigh Valley, Pa.....	Jan. 5, 8
Maine, Portland.....	Jan. 12, 15
Maryland, Baltimore.....	Jan. 5, 8
Massachusetts, Boston.....	Jan. 27, Feb. 4
New England, Worcester, Mass.....	Dec. 1, 4
Western New York, Buffalo.....	Feb. 10, 17

## PUBLICATIONS RECEIVED.

## TRANSACTIONS OF THE MASSACHUSETTS HORTICULTURAL SOCIETY FOR 1874. Part I.

Our thanks are due to Mr. E. W. Buswell, the Treasurer and Recording Secretary of this old and flourishing society. This first Part is made up chiefly of able essays and interesting discussions. At the first business meeting held 10th of January, 1874, the society offer the large sum of \$5,500 in prizes for fruits, plants, and flowers and vegetables. We shall avail ourselves of an early opportunity to make such extracts from these transactions as will be interesting to such of our readers who take pleasure in Horticulture.

"PRACTICAL FARMER" and "Journal of the Farm" consolidated.

Daniel Baugh, editor of the *Journal of the Farm*, has sold that journal to Paschall, Morris & Co., publishers of the *Practical Farmer*; the unexpired subscriptions to the former will be filled by the consolidated journal. The able hands into which the *Journal of the Farm* has fallen is a guarantee to the patrons of the latter that an adherence to the consolidation will be profitable. We commend the *Practical Farmer* to all who need a standard agricultural journal, Philadelphia, \$1.50 a year.

List of Premiums of the Iowa State Agricultural Society, to be held at Keokuk, September 21, 22, 23, 24 and 26, 1874.

PHILLIP'S SOUTHERN FARMER.—We take pleasure in calling attention to this valuable Monthly. Dr. Phillips, the head of a large and able editorial corps, is too well known in the agricultural world to need any flattering commendation from us. The July number is marked with ability—it is standard—and deserves the patronage of every farmer and planter, who desires to keep pace with the times—this is our "private opinion publicly expressed"—and we advise all to send \$2 to the Phillips "Southern Farmer," Memphis, Tenn., believing they will get the full value of their money. Do it.

NEW JERSEY STATE FAIR.—The sixteenth State Fair of the New Jersey State Agricultural Society, will be held on the Society's grounds at Waverly Station, N. J. Railroad, near Newark, commencing Monday, September 14th, and continue throughout the week.

This Society has this year departed, to a great extent, from the practice of awarding medals, and offers money premiums, which with the State premiums, amount to the sum of \$14,311.00.

Address, Wm. M. Force, Secretary, Newark, N. J.

From D. L. Hall, Secretary, a copy of the Premium List of the Kansas City Industrial Exposition and Agricultural Fair, to be held in Kansas city, Mo., September 14th to 19th, 1874. Entries open to the world—premiums \$20,000.

From Prof. W. B. Royall, Secretary Wake Forest College, Wake county, N. C., their catalogue of thirtieth session, 1873-'74.

From General Jones, Register of the Maryland Agricultural College—Session of 1873-'74.

## JUST AS OF OLD.

I saw my love in dreams last night  
 Pass up the sleeping moonlit lands,  
 The love-beams in her dear eyes bright,  
 A rosebud in her roseleaf hands.  
 And round me, as I nearer stept,  
 I felt her fond arms steal and fold,  
 While close aganist my heart she crept,  
 Just as of old.

The gray dawn broke, my love was gone,  
 The golden dream was past and dead;  
 I gat me to the churchyard lone  
 Wherein my love lay buried.  
 I found a headstone gray with years,  
 I bowed me to the morn-mists cold,  
 I wept, and knew she saw my tears,  
 Just as of old.

But ever while I live alone,  
 This comfort comes and soothes my care—  
 We two may meet, when all is done,  
 Far off in heaven's flower-garden fair.  
 And by the light above, beyond,  
 Chastened, each other's face behold,  
 Sainless, more pure, but true and fond,  
 Just as of old.

It is not uncommon, in giving advice to newly married young ladies who marry poor young men, to allude to the fact that Eve married a gardener: but they don't say anything about the gardener losing his situation on account of that match.

A man can do without his own approbation in much society, but he must make great exertions to gain it when he lives alone.